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# TIDE TABLES

FOR THE

# EASTERN COASTS OF CANADA

FOR THE YEAR

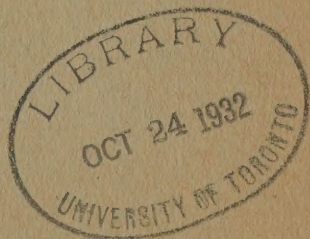
## 1911

Including the River and Gulf of St. Lawrence, the Atlantic Coast, the Bay of Fundy, Northumberland and Cabot Straits; and Information on Currents.

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Issued by the TIDAL AND CURRENT SURVEY in the DEPARTMENT OF MARINE  
AND FISHERIES of the DOMINION OF CANADA  
(Fifteenth year of issue)

W. BELL DAWSON, D.Sc., M.Inst.C.E., F.R.S.C., Superintendent.



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OTTAWA  
GOVERNMENT PRINTING BUREAU  
1910





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## OTHER INFORMATION ISSUED BY THE TIDAL SURVEY.

**TIDE TABLES FOR THE PACIFIC COAST OF CANADA.**—Including Victoria, B.C., Clayoquot, Sand Heads in the Strait of Georgia, Vancouver, Prince Rupert and Port Simpson. With tidal differences for Esquimalt, New Westminster, Nanaimo, and other localities throughout the Strait of Georgia, and northward to Port Simpson; and information on the Currents in the various passes and narrows, with tables showing the time of Slack Water.

**TIDE TABLES FOR POINTS ON THE ST. LAWRENCE SHIP CHANNEL.**—Prepared specially and supplied, with other tidal information, for a publication issued by the Marine Department for the use of the Pilot service.

**POCKET EDITIONS.**—Two abridged editions in small size are issued; one containing the Tide Tables for Quebec and Father Point, and the other the Tide Tables for St. John, N.B. together with the time of arrival of the Bore at Moncton.

**INVESTIGATION OF CURRENTS.**—The permanent and tidal sets of the Current on the leading steamship routes are also being investigated by the Tidal and Current Survey. The regions now examined include the Gulf of St. Lawrence, Belle Isle strait, the Bay of Fundy and the offing of the South coast of Newfoundland. The results obtained have been published as pamphlets, copies of which may be had on application to the Department of Marine and Fisheries, Ottawa. These pamphlets are as follows :—

“The Currents in the Gulf of St. Lawrence, including the Anticosti region, Belle Isle and Cabot straits.” 28 pages. Describing the currents, and explaining the general circulation of the water in the Gulf.

“The Currents in Belle Isle strait,” from investigations during two seasons. 43 pages with a Chart and three Plates illustrating the character of the current.

“The Currents at the Entrance of the Bay of Fundy, and on the Steamship Routes in its Approaches off southern Nova Scotia.” 17 pages, with Tables and Chart of currents.

“The Currents on the South-eastern coasts of Newfoundland, and the amount of Indraught into the Larger Bays on the South coast.” 33 pages, with eight Plates showing the set of the currents, and a general Chart.

“Tables of the Currents in the Bay of Fundy.” Giving the direction and velocity of the currents, hour by hour, and the time of slack water, throughout the region extending from St. John, N.B. to Cape Sable. 15 pages, with Tables and Chart of currents.

Brief summaries of the more important results of these investigations are given on pages 52 and 53.



# TIDE TABLES

FOR

## THE EASTERN COASTS OF CANADA

FOR 1911.

These Tide Tables with Tidal Differences for other places, are issued by the Tidal and Current Survey, in the Department of Marine and Fisheries of the Dominion of Canada. They are based upon observations obtained by means of self-registering tide gauges, which are kept in continuous operation day and night throughout the year. The records are reduced by the latest methods of analysis, by which the Tidal Constants are arrived at; and from these the five principal tide tables are calculated in the Nautical Almanac office, London.

**TIDE TABLES FOR PORTS OF REFERENCE.**—The Tide Tables for Quebec are based upon tidal record during thirteen complete years, between November 1893 and April 1908. The Tide Tables for Father Point are based upon tidal record during nine complete years; between January 1897 and October 1907. The Tide Tables for Halifax are based upon the analysis of a tidal record which was obtained during the years 1851, 1852, 1860, and 1861, together with the record obtained by this Survey during nine complete years, between October 1895 and July 1906. The Tide Tables for St. John, N.B. are based upon tidal record during ten complete years, between April 1894 and June 1905. The Tide Tables for St. Paul island, which commands the main entrance to the Gulf of St. Lawrence, are based upon tidal record during seven complete years, between October 1895 and August 1905.

As the accuracy of tide tables is represented by the length of the tidal observations on which they are based, the tables for Quebec, Father Point, Halifax and St. John are now superior to the tide tables for any harbour on the Atlantic coast of the United States, from Maine to the Gulf of Mexico.

**TIDE TABLES FOR OTHER PORTS.**—The tables for Cap à la Roche, on the Ship Channel above Quebec, are based on the Semaphore record throughout the seasons of 1901, 1902, 1903 and 1904, and on a tide gauge record from July to November in 1905 and 1906. These have afforded simultaneous comparisons with Quebec. They show a variation with the stage of the water as it becomes lower during the season, which is allowed for in the calculations.

Beaujeu channel. Computed also from Quebec; the data being derived from simultaneous observations obtained in 1908 at Crane island wharf and L'Islet, above and below.

Yarmouth. Computed from St. John, on the basis of simultaneous observations at the two places during two full years from 1898 to 1900.

Pictou. Calculated from St. Paul island by means of two series of variable differences, for high water and low water respectively; which are derived from observations throughout the seasons of 1896, 1897, 1901 and 1903. Both series vary in accordance with the declination of the moon, and alternate with its upper and lower transits. The variation in the moon's declination during the 19-year cycle is also allowed for.

Charlottetown. Calculated from Pictou, by means of two further series of variable differences, which are derived from simultaneous observations at the two places in the summer seasons of 1896, 1901, 1903, 1907 and 1908.

**TIDAL DIFFERENCES.**—The information on which the tidal differences are based, for the various localities, is fully stated in the list at the end of these tables.

WM. P. ANDERSON,  
*Chief Engineer.*

W. BELL DAWSON,  
*Superintendent of Tidal Surveys.*

# THE ST. LAWRENCE AND CHALEUR BAY.

LOCALITIES REFERRED TO QUEBEC.—From tidal observations taken in 1900 it was found that the tidal portion of the St. Lawrence above Orignaux point, or the Traverse, to the head of tide-water at Lake St. Peter, can all be referred to Quebec. The open estuary below Orignaux point can be referred to Father Point with much better results. Also, the upper part of the Saguenay can best be referred to Quebec, as the tide is similar in character.

In the river above Quebec the tidal differences vary with the season; as the tide takes a few minutes longer to run up the river in spring when the water is at a higher stage, than in autumn when it is lower and the current is less. The figures given are the average values.

The observations and other information on which the tidal differences are based, are given concisely in the list at the end of the tide tables.

LOCALITIES REFERRED TO FATHER POINT.—It has been ascertained by careful comparison of simultaneous observations, that the whole of the open estuary of the St. Lawrence below Orignaux point, can be referred to Father Point with the best advantage; together with Gaspé, the southern coast of Anticosti, and Chaleur bay.

## WITH QUEBEC TIDE TABLES.

### TIDAL DIFFERENCES for the St. Lawrence.

All results obtained, are in Eastern Standard time.

LOCALITY.	DIFFERENCES.		RANGE.	
	For	For	Springs.	Neaps.
	H. W.	L. W.		
	H. M.	H. M.	Feet.	Feet.
Three Rivers.....	add 4 45	add 6 15	1	$\frac{1}{4}$
Champlain.....	" 4 10	" 5 30	3	1
Batiscan.....	" 3 35	" 4 48	$3\frac{1}{2}$	$1\frac{1}{4}$
Cap à la Roche*.....	" 2 36	" 3 47	7	$3\frac{3}{4}$
Grondines.....	" 2 17	" 3 18	$8\frac{1}{2}$	5
Lotbinière.....	" 2 09	" 2 56	$9\frac{1}{2}$	$5\frac{1}{2}$
Richelieu rapids.....				
Point Platon.....	" 1 42	" 2 11	$13\frac{1}{2}$	$9\frac{1}{4}$
Ste. Croix.....	" 1 31	" 2 00	14	$9\frac{1}{2}$
			RISE.	RISE.
St. Augustin.....	" 0 52	" 0 54	$16\frac{1}{2}$	11
St. Nicholas.....	" 0 35	" 0 35	17	12
QUEBEC. §.....	" 0 00	" 0 00	18	13
St. Laurent.....	sub. 0 20	sub. 0 30	$17\frac{1}{2}$	14
St. Jean d'Orleans....	" 0 35	" 0 50	$17\frac{1}{2}$	14
Berthier.....	" 0 47	" 1 08	$17\frac{1}{2}$	14
Grosse Isle.....	" 0 57	" 1 19	19	13
Crane island wharf....	" 1 08	" 1 35	$18\frac{1}{2}$	13
Beaujeu channel*.....	" 1 10	" 1 43	$18\frac{1}{2}$	13
L'Islet.....	" 1 17	" 2 05	18	13
Coudres island.....	" 2 16	" 3 10	$17\frac{1}{2}$	13
Chicoutimi, at head of Saguenay river...	" 3 31	" 3 18	12	8

\* See Tide Tables for these localities as published herein.

§ For the rise of Springs and Neaps at Quebec, hour by hour, see four pages further on.

## WITH FATHER POINT TIDE TABLES.

### TIDAL DIFFERENCES for the St. Lawrence estuary.

All results obtained, are in Eastern Standard time.

LOCALITY.	DIFFERENCES.		RISE OF TIDE	
	For	For	Springs.	Neaps.
	H. W.	L. W.		
	H. M.	H. M.	Feet	Feet.
Orignaux point.....	add 1 35	add 1 48	$17\frac{1}{2}$	13
Murray bay.....	" 1 02	" 1 07	17	12
Rivière du Loup.....	" 0 53	" 0 58	16	$10\frac{1}{2}$
Brandy Pots.....	" 0 46	" 0 49	17	10
Tadoussac.....	" 0 34	" 0 37	17	10
Green island.....	" 0 35	" 0 39	16	$9\frac{1}{2}$
Trois Pistoles.....	" 0 07	" 0 11	15	9
Bic island.....	" 0 05	" 0 08	14	$8\frac{1}{2}$
FATHER POINT.....	" 0 00	" 0 00	14	$8\frac{1}{2}$
Little Metis.....	sub. 0 03	sub. 0 03	13	8
Matane.....	" 0 05	" 0 05	11	7
Cape Chat.....	" 0 08	" 0 10	13	8
Point de Monts.....	" 0 08	" 0 10	12	6
Gaspé basin.....	" 0 07	" 0 31	5	3
Anticosti island:				
South-west point...	" 1 04	" 1 02	6	4
TIDAL DIFFERENCES for Chaleur bay.	DIFFERENCES.		RISE OF TIDE	
	For	For	Springs.	Neaps.
	H. W.	L. W.		
	H. M.	H. M.	Feet.	Feet.
In Eastern time:—				
Carleton point, Que...	add 0 22	add 0 16	8	5
In Atlantic time:—				
Dalhousie, N.B.....	" 1 33	" 1 27	9	6
Campbellton, N.B. ...	" 2 25	.....	10	7



# THE ST. LAWRENCE RIVER.

## SPECIAL FEATURES OF THE TIDE ABOVE QUEBEC.

From St. Augustin, where the first bars above Quebec occur, to the head of tide water at Lake St. Peter, the tides show unusual features; and their behaviour is also modified by the variation in the river level during the season. The mean level of the water in the river falls gradually from the high stage in spring to the low stage in autumn. The usual change in level from this cause is *five feet* from April to October.

The following are the most noteworthy features of the tide, carefully and concisely stated, with special reference to the lower stages of the river and the tidal low waters; as these are of most importance in regard to the depth available for navigation.

(1) At Point Platon and above, Low Water at Neap tides falls lower than Low Water at Spring tides. At ordinary stages of the river, the lowest Low Waters of the month thus occur shortly after the moon's quarters. At the highest flood stages, the lowest Low Waters may be long after the moon's quarters, and they may even be as late as the date of the next new or full moon. (At Quebec, L. W. at Neap tides is on the average  $2\frac{3}{4}$  feet above the level of L. W. at Spring tides, as usual. The reversal of their relative levels takes place in the neighbourhood of St. Augustin; being somewhat further up or down the river as the stage varies with the season.)

(2) Next in importance to the Springs and Neaps, is the variation in height caused by the change in the moon's distance. It is accordingly possible for Low Water at one of the Neap tides of the month, to be *a foot and a half* lower than the other. There is also a distinct diurnal inequality at times when the moon's declination is high. This may amount to a difference of more than *one foot* in the height of the two Low Waters of the same day. The inequality in the height of successive High Waters is much greater. Such variations should not be attributed to wind disturbance, as they are strictly astronomical.

(3) Throughout the river, at Quebec and above, the range of the tide is reduced by the high stage of the river. The range thus becomes greater during the season, as the river falls; and accordingly, the decrease in the available depth at High Water, is not so great as the fall of the river itself would indicate.

(4) The Tidal Differences also vary with the season. As far as the Richelieu rapids, the time taken by the tide to run up the river from Quebec becomes less as the season advances; but above these rapids, the reverse is the case. The amount of this variation is 6 to 12 minutes.

*Datum.*—The Chart datum, adopted by the Hydrographic Survey, is the sloping surface of the river at the exceptionally low stage observed in the autumn of 1897.

*Stage of the River.*—For the purposes of navigation, the best measure of the stage of the river is the height, above the Chart datum, of the lowest Low Water of each month. The values in the following table are thus measured.

LOCALITY.	NEAP RANGE.		L. W. Springs above L. W. Neaps.	SPRING RANGE. — Average.	STAGE OF THE RIVER.						
	High Stage.	Low Stage.			MONTH.	Point Platon.	Grondines.	Cap à la Roche.	Batiscan and Champlain.	Three Rivers.	Mean Value.
	Feet.	Feet.	Feet.	Feet.		Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
Three Rivers ....	0.2	0.3	1.2	1.0	May . . . . .	4.7	5.9	5.1	5.3	6.1	5.5
Champlain. ....	0.8	1.0	1.1	2.8	June . . . . .	4.2	4.6	4.0	4.3	5.1	4.4
Batiscan. ....	1.0	1.3	1.0	3.4	July . . . . .	3.8	3.8	3.1	3.1	3.0	3.4
Cap à la Roche ..	3.4	3.9	1.1	6.9	August . . . .	3.0	2.7	2.0	2.1	2.1	2.3
Grondines. ....	4.5	5.4	1.2	8.4	September . .	2.2	1.6	1.4	1.3	1.7	1.6
Lotbinière. ....	5.4	6.0	1.2	9.2	October . . . .	2.0	1.5	1.3	1.2	1.4	1.4
Point Platon ...	9.0	9.7	1.3	13.5	November . . .	2.1	1.7	1.4	0.9	1.2	1.4
Quebec ... ..	10.2	10.8	(Reversed)	18.0							

*Depth available.*—The above table gives the data from which the depth, in addition to the Chart soundings, may be found, by combining the figures for the Stage of the River with the Spring or Neap range. The results are based on observations obtained in 1887 and 1888 by Mr. R. Steckel; in 1901, 1902 and 1903 by the Hydrographic Survey; and in 1905 and 1906 by this Survey.

It is to be noted that the figures given, are average values for the month or for several seasons; without allowance for the notable variations which occur at certain times as above explained.

#### CURRENTS OF THE LOWER ST. LAWRENCE.

The relation between the turn of the current in the offing and the local tide had been ascertained during the Admiralty surveys and indicated on the charts. But the time of the tide itself at these localities was not known until observations taken in 1900 brought them into relation with Quebec, for which tide tables are published by this Survey. The Admiralty determinations have thus been reduced to the practical form given in the following table.

*The Current in the Traverse.*—This may be considered the crucial point on the Lower St. Lawrence, as the currents here attain their greatest strength. Observations of the turn of the current were obtained in 1900, from May to September. Also in the Upper Traverse, the swing of the light-ship had been noted in 1896 and 1897 from May to November; affording over 650 observations in each year, for comparison with the simultaneous record at the tidal stations.

The following features of the current are noteworthy :—

(1.) There is practically no variation from month to month in the time at which the current turns. The monthly averages are well within 5m. of the general average.

(2.) During the course of the month, the only appreciable variation from the average is in the turn after Low Water. This occurs in two ways: Firstly, a variation which ranges in the Lower Traverse from 3h. 53m. at the springs to 4h. 07m. at the neaps; the general average being 3h. 57m. Secondly, for a few days when the moon is in high declination, north or south of the equator, the turn at Low Water may occur 15m. earlier or later than the average. At High Water, this variation is scarcely appreciable.

(3.) A direct comparison between the Upper and Lower Traverse, afforded by 284 signalled observations, shows that in the Upper Traverse the flood begins 5m. to 13m. earlier and the ebb 22m. earlier, than in the Lower Traverse.

Tidal Streams in offing of Localities named. Referred to time of tide at QUEBEC.	Flood stream begins after or before L. W.	Ebb stream begins after or before H. W.	Duration of Flood.	Duration of Ebb.
	H. M.	H. M.	H. M.	H. M.
Quebec harbour.....	1 10 after.	1 05 after.	5 00	7 30
St. Laurent .....	0 25 "	0 50 "	5 00	7 25
Berthier.....	0 02 "	0 18 "	5 05	7 20
Grosse Isle.....	0 19 before.	0 08 "	5 10	7 10
L'Islet.....	1 19 "	0 57 before.	5 30	6 50

Tidal Streams in offing of Localities named. Referred to time of tide at FATHER POINT.	Flood stream begins after L. W.	Ebb stream begins after H. W.	Duration of Flood.	Duration of Ebb.
	H. M.	H. M.	H. M.	H. M.
In Upper Traverse.....	3 52 after.	3 13 after.	5 25	7 00
In Lower Traverse. (See complete tables).....	3 57 "	3 35 "	5 45	6 45
Orignaux point.....	2 18 "	2 45 "	5 55	6 30
In Brandy Pot channel.....	2 04 "	1 46 "	6 05	6 20
At White island Light-ship.....	2 08 "	2 19 "	6 25	6 00
Tadoussac.....			6 08	6 15
Green island.....			6 00	6 24
Bic island.....			5 50	6 34

All results obtained by the use of the above tables, are in Eastern Standard time for the 75th Meridian.



# THE GULF OF ST. LAWRENCE, NORTHUMBERLAND AND CABOT STRAITS.

LOCALITIES REFERRED TO ST. PAUL ISLAND AND PICTOU.—From investigation of the tides throughout the southern half of the Gulf St. Lawrence, and comparisons with several of the principal tidal stations, it has been ascertained that these tides can best be deduced from St. Paul island, which commands the main entrance to the Gulf from the Atlantic. For this purpose a division is required into two regions as follows :—

(1) The open Gulf coast, including Miramichi bay and northern New Brunswick, and the north coast of Prince Edward island. The tides on these coasts can be referred to St. Paul island, provided that the difference in time is taken as EARLIER, or for the preceding tide. Otherwise the tidal differences are not constant, but vary so widely as to be practically valueless.

(2) Northumberland strait. This forms a special region, characterized by a marked diurnal inequality in the tide ; and at the western end of the strait, in the vicinity of Shediac, the rise and fall is so slight that the time of the tide is uncertain. The relation of this region to St. Paul island is complex ; but by first calculating tide tables for Pictou by the method already explained, it can be utilized as a secondary port of reference in the middle of the strait itself, and the inequality in the two directions can thus be better distributed. For Charlottetown special tide tables are calculated.

The tides on both sides of Cabot strait can be referred directly to St. Paul island with good results ; including the whole north-eastern coast of Cape Breton island, and some part of south-western Newfoundland. It is probable that a large part of the interior of the Gulf can also be referred to St. Paul island ; but the tide in the greater part of the Gulf area has so small a range as to be of little importance to shipping.

## WITH ST. PAUL ISLAND TIDE TABLES.

All results are in Atlantic Standard time.

Locality.	For H.W. For L.W.	
	H. M.	H. M.
<i>Miramichi bay and river :—</i>		
Lower Neguac, at north entrance.....	sub. 3 22	sub. 3 07
Oak point, at head of bay.....	" 3 40	" 3 18
Chatham, N.B.....	" 2 50	" 2 30
Newcastle. (Observations at Nelson).....	" 2 36	" 1 51
Millerton.....	" 2 31	" 1 06
Cassilis.....	" 2 16	" 0 50
<i>North coast, P. E. Island :—</i>		
Alberton, P.E.I.....	" 2 33	.....
Richmond bay ; within the entrance.....	" 2 26	.....
Grand Rustico ; at the lighthouse.....	" 2 31	.....
St. Peters ; at entrance to bay.....	" 2 10	.....
<i>Cabot strait :—</i>		
Neil harbour, C.B.....	" 0 19	sub. 0 23
Sydney, C.B.....	" 0 25	" 0 27
Port aux Basques, Newfoundland.....	add 0 17	add 0 17

## WITH PICTOU TIDE TABLES.

All results are in Atlantic Standard time.

Locality.	For H.W. For L.W.	
	H. M.	H. M.
Souris.....	sub. 1 22	sub. 1 17
Georgetown.....	" 1 00	" 0 55
Port Hood.....	" 1 02	.....
Cape Bear.....	" 0 57	.....
Cape George.....	" 0 45	.....
PICTOU.....	" 0 00	" 0 00
Tatamagouche.....	add 0 04	.....
Pugwash.....	" 0 36	.....
Charlottetown.....	" 0 36	add 0 51
Cape Tormentine.....	" 0 23	" 0 43
Baie Verte.....	" 0 27	.....
Summerside.....	" 0 50	" 1 15

NOTE.—The south-east coast of Cape Breton island, and the eastern angle of Newfoundland, are referred to Halifax.

## CURRENT IN THE GUT OF CANSO.

In the Gut of Canso, the apparent irregularities in the turn of the current are due to the difference in the character of the tide itself, at the two ends of the Gut. The tide in the region of Northumberland strait shows a marked diurnal inequality, which accords with the declination of the moon ; and while these changes recur periodically at the northern end of the Gut, the tide at the Atlantic end maintains the usual variation in height from springs to neaps with great regularity. As the current through the Gut depends on tides which are so different in character at its two ends, it necessarily shows great complexity.

## ATLANTIC COAST OF NOVA SCOTIA.—TIDE AT QUEBEC.

LOCALITIES REFERRED TO HALIFAX.—The whole south-eastern coast of Nova Scotia can be referred to Halifax with advantage; and the tidal differences are small, as the tide is nearly simultaneous throughout this region.

From observations taken in 1902 from Shelburne to Yarmouth, it was found that ports in the vicinity of Cape Sable and eastward can best be referred to Halifax; while from Pubnico westward they can be referred to St. John, N.B., with greater accuracy. The limit eastward is at Scatari; as the north-eastern coast of Cape Breton island must be included with Cabot strait, and referred to St. Paul island. Some part of south-eastern Newfoundland can also be referred to Halifax with advantage, as indicated by observations at Trepassey near Cape Race.

## WITH HALIFAX TIDE TABLES.

TIDAL DIFFERENCES; Atlantic Coast of Nova Scotia.  
All results obtained, are in Atlantic Standard time.

LOCALITY.	DIFFERENCES.		RISE OF TIDE	
	For	For	Springs	Neaps.
	H. W.	L. W.		
	H. M.	H. M.	Feet.	Feet.
Cape Sable, at Clarke harbour.....	add 1 33	add 0 54	11	9
Barrington passage....	" 0 56	" 0 26	8½	6½
Shelburne.....	" 0 35	" 0 13	7	5½
Liverpool bay.....	" 0 06	.....	8	5
Lunenburg.....	" 0 08	.....	7	6
Mahone bay.....	sub.0 01	.....	7½	6½
St. Margaret bay.....	" 0 00	.....	7	6
HALIFAX HARBOUR.....	" 0 00	.....0 00	6	5
Sable island, N. side...	" 0 33	.....	4	.....
Sable island, S. side...	" 1 33	.....	4	.....
Jeddore harbour.....	" 0 06	.....	6½	5
Sheet harbour.....	add 0 13	.....	6½	4½
Liscombe harbour.....	" 0 05	.....	6½	4½
Country harbour.....	sub.0 16	.....	6½	5½
Canso harbour.....	" 0 11	.....	6½	4½
Guysborough.....	add 0 23	.....	6½	4½
Arichat.....	" 0 11	.....	5	4
St. Peter bay.....	sub.0 30	.....	6	4
Louisburg harbour.....	" 0 03	.....	5	4
Newfoundland:— Cape Race, at Trepassey harbour.....	" 0 32	sub.0 52	6½	5

For Sydney and the region of Cabot strait, see differences with the Tide Tables for St. Paul island.

## TIDE AT QUEBEC.

Hourly height of the tide, above the Admiralty Low Water datum, as in the Tide Tables.

SPRING TIDE.		NEAP TIDE.	
(Average Range, 18 feet.)		(Average Range, 10½ feet.)	
Hour.	Feet.	Hour.	Feet.
At Low Water.....	0·0	At Low Water....	2·7
1 h. after L. W....	5·1	1 h. after L. W....	4·6
2 h. " " ....	10·0	2 h. " " ....	7·9
3 h. " " ....	13·9	3 h. " " ....	10·6
4 h. " " ....	16·9	4 h. " " ....	12·3
4½ h. (At H. W.)...	18·0	5 h. " " ....	13·1
1 h. after H. W....	15·3	5½ h. (At H. W.)..	13·2
2 h. " " ....	11·2	1 h. after H. W....	12·0
3 h. " " ....	9·1	2 h. " " ....	10·4
4 h. " " ....	7·0	3 h. " " ....	8·9
5 h. " " ....	4·7	4 h. " " ....	7·2
6 h. " " ....	2·7	5 h. " " ....	5·4
7 h. " " ....	0·9	6 h. " " ....	3·9
7½ h. (At L. W.)..	0·0	7¼ h. (At L. W.)..	2·7

*Variations in the Range.*—The more important variations from the average ranges above given, are: (1) With the moon's distance. When Perigee occurs at the new or full moon, the height of one of the Spring tides of the month may be three feet more than the other. (2) When the moon is in high declination, N. or S. of the equator, a few days occur when the two tides of the day are quite unequal in range. At such times, the Spring range may be a foot and three-quarters more or less than the average. The Neap tides are similarly affected.

## CURRENT IN NORTHUMBERLAND STRAIT.

The tide throughout this region is characterized by a marked diurnal inequality. This feature of the tide is under the influence of the declination of the moon; and the alternations in the time-intervals and the height are in accord with the moon's upper and lower transits. The current in the strait shows this feature as distinctly as the tide itself. It is most pronounced when the moon is in high declination, north or south of the equator.

The period in which this variation recurs is the tropical or declination-month, which is over-run by the synodic month of the moon's phases. Hence when the variation is greatest it occurs sometimes at the spring tides and sometimes at the neaps. It is for these reasons that the turn of the current in the strait has an appearance of great irregularity, which is usually attributed to the wind, whereas in reality it is almost wholly astronomical.



## TIDAL DIFFERENCES FOR THE BAY OF FUNDY.

LOCALITIES REFERRED TO ST. JOHN, N.B.—The Bay of Fundy as a whole can be referred to St. John with advantage, as found from simultaneous tidal observations throughout the bay in 1898. From further observations taken in 1902, from Yarmouth to Shelburne, it was found that the outer part of the bay, as far as Pubnico, can best be referred to St. John; while ports in the vicinity of Cape Sable and eastward can be referred to Halifax with greater accuracy.

## WITH ST. JOHN TIDE TABLES.

All results obtained, are in Atlantic Standard time for the 60th Meridian.

Localities in lower part of the Bay.	DIFFERENCES.		RISE OF TIDE		Localities in upper part of the Bay.	DIFFERENCES.	RISE OF TIDE		
	For	For	Sp'gs.	Neaps.			For	Sp'gs.	Neaps.
	H. W.	L. W.					H. W.		
	H. M.	H. M.	Feet.	Feet.		H. M.	Feet.	Feet.	
Lower East Pubnico . . .	sub.1 56	sub.2 18	12	10	ST. JOHN HARBOUR.....	add 0 00	27	23	
Yarmouth harbour.....	" 1 07	" 1 15	16	13	Quaco.....	" 0 12	30	25	
Grand passage.....	" 0 31	" 0 29	21	17	Spicers cove, near Cape Chig- necto.....	" 0 12	37	30½	
Petit passage.....	" 0 34	" 0 28	22	18	Grindstone island.....	" 0 21	41	34½	
Weymouth.....	" 0 26	" 0 22	24	20	Folly point; at mouth of Petit- codiac river.....	" 0 24	45	38	
Digby pier.....	" 0 18	" 0 17	27½	23	Moncton.....	" 0 46	*	*	
Annapolis.....	add 0 06	add 0 10	29	24	Cumberland basin at Sackville..	" 0 30	45½	38	
Machias Seal island....	sub.0 08	.....	18	14½	In Minas basin :—				
Grand Manan island :—					Noel bay.....	" 1 14	50½	43½	
Seal cove.....	" 0 22	.....	20	15	Windsor.....	" 1 08	*	*	
Grand harbour.....	" 0 10	.....	21	17½	Horton bluff.....	" 1 05	48	40	
Fish head.....	" 0 03	.....	22½	18½	Parrsborough pier ..	" 0 53	43	37½	
Campobello island at Welchpool.....	add 0 02	add 0 10	23½	20	Spencer anchorage.....	" 0 17	39	33	
Eastport, Maine †.....	" 0 00	" 0 08	21½	18½	Black Rock point.....	" 0 03	36	31	
St. Andrews.....	" 0 08	" 0 18	25	21½	Isle Haute.....	sub.0 04	33	28½	
L'Etang harbour.....	" 0 01	" 0 05	23½	20	Port George.....	" 0 07	32	28	
Lepreau bay.....	sub.0 01	" 0 03	24½	21					

AVAILABLE DRAUGHT—The draught here given is the average amount. It may vary as much as two feet, more or less, from the average.

All the wharves mentioned below, dry at Low Water.

Windsor—At the railway wharf.....  
(At other wharves at Windsor, the draught is nearly the same.)

Parrsborough pier—At the head of the pier  
Hopewell cape—At the head of the wharf.

Moncton—At Dunlap's wharf; depth on  
bench of mattress-work on which vessels lie  
at low water.....

(At other wharves along the city front  
the draught is nearly the same.)

At H. W.

Spring tides

(Average)

12 feet

34 feet

13½ feet

20½ feet

At H. W.

Neap tides

(Average)

6 feet

28 feet

7 feet

14 feet

The Bore at Moncton—In 1898, from August to November, 145 observations of the arrival of the Bore were obtained by means of a registering gauge, operating day and night. From these, the following rule has been deduced.

To find the time of arrival of the Bore, subtract the following amounts from the time of the next High Water at St. John, as given in the tide tables herein :—

At Spring tides, subtract 2h. 10m.

At Neap tides, subtract 2h. 32m.

Average during the month, 2h. 21m.

NOTE.—Tables of the time of arrival of the Bore are published in the Abridged Edition of the St. John Tide Tables.

\* River tide; does not fall to true low-water level. See draught given in lower table.

‡ For the tide in Eastern Standard time, add the tidal difference given, and then deduct one hour.

Date.	Day.	JANUARY.				Date.	Day.	FEBRUARY.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	§.	6:54 12.7	18:48 15.7	1:37 1.5	13:34 2.5	1	W.	7:32 13.9	19:37 16.4	2:27 1.1	14:29 1.6
2	M.	7:26 12.8	19:19 16.0	2:15 1.6	14:13 2.4	2	Th.	8:03 14.6	20:11 16.5	3:04 1.2	15:11 1.5
3	Tu.	7:56 12.9	19:51 16.2	2:52 1.6	14:53 2.3	3	F.	8:36 15.2	20:46 16.2	3:41 1.3	15:55 1.5
4	W.	8:28 13.2	20:28 16.2	3:30 1.7	15:34 2.2	4	Sa.	9:14 15.6	21:26 15.5	4:20 1.6	16:42 1.6
5	Th.	9:03 13.6	21:11 15.9	4:09 1.7	16:17 2.1	5	§.	10:02 15.6	22:18 14.4	5:01 1.8	17:34 2.0
6	F.	9:43 13.9	22:00 15.3	4:49 1.8	17:03 2.1	6	M.	10:59 15.3	23:36 13.1	5:46 2.2	18:33 2.4
7	Sa.	10:33 14.0	22:58 14.4	5:31 1.9	17:55 2.2	7	Tu.	.....	12:06 14.9	6:40 2.7	19:45 2.8
8	§.	11:32 14.1	.....	6:18 2.1	18:53 2.4	8	W.	1:00 12.1	13:19 14.6	7:44 3.1	21:00 2.7
9	M.	0:09 13.6	12:38 14.3	7:15 2.4	20:00 2.6	9	Th.	2:18 11.7	14:31 14.8	8:57 3.2	22:14 2.1
10	Tu.	1:28 13.1	13:49 14.9	8:18 2.6	21:16 2.4	10	F.	3:35 12.0	15:35 15.4	10:09 2.9	23:18 1.2
11	W.	2:38 13.0	14:54 15.6	9:24 2.7	22:26 1.9	11	Sa.	4:23 12.7	16:33 16.1	11:13 2.2	.....
12	Th.	3:37 13.3	15:52 16.5	10:28 2.5	23:28 1.3	12	§.	5:16 13.5	17:26 16.6	0:12 0.5	12:11 1.6
13	F.	4:30 13.6	16:46 17.2	11:27 2.2	.....	13	M.	6:04 14.2	18:15 17.0	0:59 0.2	13:02 1.2
14	Sa.	5:21 14.0	17:37 17.6	0:24 0.7	12:23 1.9	14	Tu.	6:47 14.9	19:02 17.0	1:42 0.1	13:49 1.0
15	§.	6:12 14.3	18:27 17.8	1:16 0.4	13:14 1.6	15	W.	7:28 15.3	19:47 16.7	2:23 0.4	14:32 1.0
16	M.	7:02 14.5	19:16 17.6	2:05 0.3	14:03 1.4	16	Th.	8:09 15.6	20:31 16.3	3:01 0.9	15:13 1.1
17	Tu.	7:52 14.6	20:05 17.1	2:51 0.4	14:50 1.4	17	F.	8:51 15.6	21:16 15.5	3:37 1.3	15:53 1.4
18	W.	8:41 14.6	20:55 16.4	3:34 0.6	15:36 1.4	18	Sa.	9:35 15.5	22:02 14.4	4:12 1.6	16:34 1.7
19	Th.	9:29 14.5	21:46 15.5	4:14 1.0	16:21 1.5	19	§.	10:22 15.0	22:53 13.2	4:47 2.0	17:17 2.0
20	F.	10:19 14.2	22:40 14.4	4:52 1.4	17:07 1.8	20	M.	11:12 14.3	23:52 12.0	5:23 2.3	18:04 2.4
21	Sa.	11:11 13.9	23:38 13.4	5:31 1.8	17:55 2.1	21	Tu.	.....	12:08 13.6	6:03 2.6	18:56 2.7
22	§.	... ..	12:07 13.6	6:13 2.1	18:47 2.4	22	W.	0:59 11.2	13:14 13.1	6:55 2.9	20:02 2.8
23	M.	0:40 12.4	13:05 13.4	7:00 2.4	19:48 2.6	23	Th.	2:08 10.8	14:20 13.0	7:53 3.1	21:14 2.5
24	Tu.	1:44 11.9	14:04 13.4	7:52 2.7	20:54 2.5	24	F.	3:10 11.0	15:21 13.4	9:08 3.0	22:20 2.0
25	W.	2:47 11.7	15:03 13.7	8:49 2.7	22:00 2.2	25	Sa.	4:06 11.5	16:12 14.1	10:12 2.6	23:14 1.4
26	Th.	3:46 11.8	15:56 14.1	9:50 2.7	23:00 1.6	26	§.	4:54 12.2	16:56 14.9	11:10 2.1	.....
27	F.	4:37 12.0	16:39 14.6	10:46 2.4	23:49 1.3	27	M.	5:32 13.0	17:35 15.6	0:01 1.0	12:02 1.7
28	Sa.	5:20 12.3	17:16 15.0	11:37 2.2	.....	28	Tu.	6:03 13.9	18:10 16.2	0:42 0.9	12:47 1.4
29	§.	5:57 12.6	17:52 15.4	0:32 1.0	12:24 2.0						
30	M.	6:31 12.9	18:28 15.8	1:12 1.0	13:07 1.9						
31	Tu.	7:02 13.3	19:03 16.1	1:50 1.1	13:48 1.7						

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LEVIS DRY DOCK.—To find the depth of water on the sill of this dock at any tide add 7.7 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.



Date.	Day.	MARCH.				Date.	Day.	APRIL.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	W.	6:33 14.7	18:43 16.7	1:21 0.9	13:30 1.2	1	Sa.	7:05 18.7	19:35 17.4	2:05 1.9	14:36 1.4
2	Th.	7:03 15.6	19:17 17.0	1:59 1.1	14:12 1.2	2	☾.	7:43 19.1	20:17 16.8	2:45 2.3	15:23 1.7
3	F.	7:34 16.6	19:54 17.1	2:36 1.3	14:54 1.2	3	M.	8:26 19.1	21:04 15.8	3:26 2.6	16:13 2.1
4	Sa.	8:07 17.2	20:34 16.6	3:12 1.6	15:38 1.4	4	Tu.	9:15 18.3	21:58 14.2	4:10 3.0	11:07 2.7
5	☾.	8:46 17.4	21:19 15.8	3:49 1.9	16:24 1.7	5	W.	10:09 17.1	23:04 12.7	5:00 3.6	18:06 3.1
6	M.	9:34 17.2	22:12 14.3	4:31 2.3	17:16 2.2	6	Th.	11:16 15.7	.....	6:00 4.1	19:12 3.4
7	Tu.	10:31 16.4	23:19 12.8	5:22 2.8	18:16 2.8	7	F.	0:26 11.7	12:40 14.5	7:11 4.4	20:24 3.2
8	W.	11:36 15.3	.....	6:22 3.4	19:24 3.1	8	Sa.	1:53 11.7	14:06 14.3	8:27 4.2	21:33 2.6
9	Th.	0:42 11.5	12:57 14.4	7:29 3.8	20:45 3.0	9	☾.	3:04 12.6	15:14 14.8	9:39 3.5	22:32 1.8
10	F.	2:05 11.2	14:17 14.4	8:41 3.8	21:59 2.2	10	M.	4:02 13.9	16:12 15.6	10:44 2.5	23:23 1.4
11	Sa.	3:15 11.8	15:26 14.9	9:52 3.2	23:02 1.3	11	Tu.	4:47 15.1	17:01 16.1	11:40 1.8	.....
12	☾.	4:14 12.9	16:22 15.6	10:58 2.3	23:53 0.7	12	W.	5:26 16.2	17:42 16.5	0:07 1.4	12:28 1.5
13	M.	5:03 14.0	17:13 16.2	11:56 1.5	.....	13	Th.	6:00 17.0	18:21 16.5	0:46 1.8	13:09 1.6
14	Tu.	5:46 15.0	17:59 16.6	0:37 0.5	12:45 1.1	14	F.	6:33 17.5	18:59 16.3	1:22 2.3	13:48 1.9
15	W.	6:26 15.9	18:42 16.8	1:17 0.7	13:28 1.0	15	Sa.	7:05 17.7	19:36 15.9	1:56 2.9	14:26 2.3
16	Th.	7:04 16.5	19:22 16.6	1:54 1.1	14:09 1.2	16	☾.	7:38 17.7	20:13 15.2	2:29 3.3	15:03 2.7
17	F.	7:41 16.8	20:02 16.1	2:29 1.7	14:49 1.5	17	M.	8:12 17.4	20:51 14.4	3:01 3.5	15:41 2.9
18	Sa.	8:18 16.8	20:43 15.4	3:02 2.2	15:28 1.8	18	Tu.	8:49 16.9	21:31 13.4	3:34 3.5	16:20 3.1
19	☾.	8:54 16.6	21:26 14.5	3:34 2.5	16:06 2.2	19	W.	9:29 16.1	22:19 12.4	4:11 3.5	17:02 3.3
20	M.	9:31 16.0	22:11 13.3	4:05 2.7	16:45 2.5	20	Th.	10:16 15.1	23:22 11.5	4:54 3.6	17:50 3.4
21	Tu.	10:12 15.2	23:02 12.1	4:39 2.8	17:27 2.8	21	F.	11:14 14.1	.....	5:46 3.8	18:46 3.4
22	W.	11:05 14.2	.....	5:22 3.0	18:18 3.0	22	Sa.	0:40 11.2	12:33 13.6	6:48 3.9	19:48 3.3
23	Th.	0:14 11.1	12:12 13.3	6:16 3.3	19:20 3.2	23	☾.	1:54 11.6	13:57 13.8	7:57 3.8	20:51 3.0
24	F.	1:33 10.6	13:26 13.1	7:20 3.5	20:28 3.0	24	M.	2:55 12.6	15:04 14.6	9:05 3.4	21:53 2.6
25	Sa.	2:37 11.0	14:38 13.4	8:31 3.4	21:35 2.5	25	Tu.	3:43 14.0	15:51 15.6	10:06 2.8	22:46 2.3
26	☾.	3:33 11.8	15:40 14.2	9:40 2.9	22:34 1.9	26	W.	4:23 15.5	16:34 16.5	11:02 2.2	23:33 2.1
27	M.	4:20 12.9	16:27 15.2	10:40 2.4	23:22 1.5	27	Th.	4:58 17.0	17:15 17.2	11:54 1.9	.....
28	Tu.	4:57 14.2	17:08 16.1	11:31 1.8	.....	28	F.	5:32 18.4	17:54 17.7	0:17 2.2	12:44 1.7
29	W.	5:29 15.4	17:46 16.9	0:05 1.3	12:19 1.5	29	Sa.	6:06 19.4	18:33 17.7	0:59 2.4	13:33 1.7
30	Th.	6:00 16.7	18:21 17.4	0:46 1.4	13:05 1.3	30	☾.	6:42 20.1	19:13 17.3	1:40 2.7	14:21 1.8
31	F.	6:31 17.8	18:57 17.6	1:26 1.6	13:50 1.3						

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LEVIS DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 7 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.

Date.	Day.	MAY.				Date.	Day.	JUNE.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	M.	7:20 20'3	19:56 16'6	2:22 3'0	15:09 2'1	1	Th.	8:45 18'8	21:38 14'6	3:40 3'5	16:37 2'4
2	Tu.	8:02 19'9	20:45 15'6	3:06 3'3	15:58 2'4	2	F.	9:44 17'4	22:44 13'9	4:33 3'7	17:29 2'7
3	W.	8:52 18'9	21:43 14'3	3:55 3'6	16:49 2'8	3	Sa.	10:53 16'1	23:54 13'6	5:30 3'8	18:22 3'0
4	Th.	9:53 17'4	22:52 13'2	4:50 4'0	17:46 3'2	4	§.	.....	12:05 14'9	6:32 4'0	19:18 3'1
5	F.	11:05 15'9	.....	5:52 4'3	18:48 3'4	5	M.	1:05 13'7	13:21 14'5	7:39 3'9	20:17 3'2
6	Sa.	0:15 12'5	12:27 14'9	6:59 4'5	19:56 3'3	6	Tu.	2:10 14'3	14:32 14'5	8:47 3'6	21:14 3'2
7	§.	1:36 12'8	13:48 14'5	8:10 4'2	21:04 3'0	7	W.	3:05 15'2	15:31 14'6	9:50 3'1	22:04 3'2
8	M.	2:41 13'7	14:57 14'9	9:19 3'6	22:03 2'6	8	Th.	3:50 16'0	16:20 14'8	10:47 2'7	22:50 3'3
9	Tu.	3:33 14'9	15:52 15'4	10:20 2'9	22:52 2'4	9	F.	4:29 16'6	17:01 14'9	11:37 2'4	23:33 3'4
10	W.	4:18 16'0	16:37 15'8	11:15 2'3	23:35 2'5	10	Sa.	5:06 17'1	17:39 14'8	....	12:23 2'4
11	Th.	4:58 16'9	17:19 16'0	.....	12:03 2'1	11	§.	5:42 17'3	18:16 14'6	0:14 3'6	13:06 2'5
12	F.	5:35 17'5	18:00 15'9	0:14 2'8	12:46 2'2	12	M.	6:17 17'3	18:52 14'3	0:54 3'8	13:47 2'8
13	Sa.	6:09 17'8	18:39 15'6	0:50 3'3	13:27 2'5	13	Tu.	6:51 17'2	19:28 13'9	1:33 4'0	14:25 2'9
14	§.	6:41 17'9	19:16 15'2	1:26 3'7	14:06 2'9	14	W.	7:26 17'1	20:05 13'6	2:12 4'0	15:01 3'0
15	M.	7:13 17'8	19:51 14'7	2:01 4'0	14:43 3'1	15	Th.	8:01 16'9	20:41 13'4	2:52 3'9	15:37 2'9
16	Tu.	7:46 17'5	20:26 14'0	2:36 4'1	15:19 3'3	16	F.	8:37 16'6	21:18 13'4	3:33 3'7	16:15 2'9
17	W.	8:20 17'1	21:02 13'4	3:12 4'1	15:56 3'4	17	Sa.	9:16 16'2	21:57 13'4	4:15 3'5	16:56 2'8
18	Th.	8:57 16'6	21:41 12'8	3:50 4'0	16:35 3'3	18	§.	10:03 15'6	22:46 13'5	5:00 3'4	17:41 2'9
19	F.	9:39 15'9	22:30 12'3	4:31 3'9	17:18 3'3	19	M.	11:04 15'0	23:45 13'7	5:51 3'4	18:31 3'0
20	Sa.	10:34 15'0	23:38 12'2	5:18 3'9	18:09 3'4	20	Tu.	.....	12:15 14'4	6:50 3'5	19:25 3'1
21	§.	11:45 14'4	.....	6:15 3'9	19:06 3'4	21	W.	0:51 14'3	13:28 14'2	7:57 3'5	20:20 3'2
22	M.	0:53 12'5	13:06 14'3	7:20 3'9	20:05 3'3	22	Th.	1:56 15'3	14:31 14'5	9:05 3'3	21:16 3'2
23	Tu.	2:00 13'5	14:16 14'7	8:28 3'6	21:04 3'1	23	F.	2:51 16'5	15:28 14'9	10:09 2'9	22:12 3'1
24	W.	2:49 14'9	15:13 15'4	9:34 3'2	22:01 2'9	24	Sa.	3:41 17'6	16:19 15'3	11:09 2'4	23:08 3'0
25	Th.	3:35 16'5	16:02 16'2	10:34 2'7	22:55 2'8	25	§.	4:30 18'6	17:09 15'6	.....	12:07 1'9
26	F.	4:17 17'9	16:47 16'7	11:30 2'3	23:45 2'8	26	M.	5:18 19'3	18:00 15'7	0:04 2'9	13:02 1'6
27	Sa.	4:57 19'1	17:31 17'0	.....	12:23 2'0	27	Tu.	6:06 19'6	18:50 15'7	0:58 2'8	13:53 1'4
28	§.	5:38 20'0	18:15 17'0	0:31 2'9	13:15 1'9	28	W.	6:54 19'5	19:39 15'5	1:50 2'7	14:42 1'3
29	M.	6:20 20'4	19:00 16'6	1:16 3'0	14:06 1'9	29	Th.	7:43 19'0	20:29 15'3	2:40 2'6	15:30 1'4
30	Tu.	7:04 20'3	19:47 16'1	2:02 3'2	14:56 2'0	30	F.	8:34 18'2	21:21 15'0	3:29 2'6	16:17 1'6
31	W.	7:52 19'7	20:38 15'4	2:50 3'3	15:46 2'1						

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LEVIS DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 7·7 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.



Date.	Day.	JULY.								Date.	Day.	AUGUST.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.		Time. H't.	
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.
1	Sa.	9:31	17.1	22:16	14.7	4:19	2.7	17:04	2.0	1	Tu.	11:06	14.2	23:38	14.6	5:35	2.4	17:52	2.5
2	☿.	10:33	15.9	23:15	14.4	5:10	2.9	17:52	2.4	2	W.	.....	12:10	13.1	6:28	2.8	18:37	2.9	
3	M.	11:40	14.7	.....	.....	6:03	3.1	18:41	2.8	3	Th.	0:39	14.2	13:16	12.2	7:26	3.1	19:28	3.3
4	Tu.	0:20	14.3	12:51	13.9	7:00	3.3	19:31	3.1	4	F.	1:40	13.9	14:21	11.8	8:29	3.1	20:25	3.4
5	W.	1:24	14.4	14:00	13.4	8:02	3.4	20:23	3.4	5	Sa.	2:39	14.0	15:22	11.8	9:33	2.7	21:30	3.3
6	Th.	2:24	14.7	14:58	13.3	9:11	3.2	21:16	3.5	6	☿.	3:34	14.3	16:16	12.1	10:43	2.2	22:29	3.0
7	F.	3:16	15.2	15:49	13.4	10:16	2.8	22:10	3.4	7	M.	4:23	14.7	17:04	12.4	11:36	1.6	23:22	2.7
8	Sa.	4:02	15.6	16:37	13.4	11:14	2.4	23:02	3.4	8	Tu.	5:05	15.2	17:46	12.8	.....	.....	12:19	1.3
9	☿.	4:45	16.0	17:21	13.5	12:03	2.1	23:49	3.3	9	W.	5:44	15.6	18:23	13.2	0:09	2.4	12:58	1.2
10	M.	5:25	16.2	18:01	13.5	.....	.....	12:46	2.0	10	Th.	6:19	15.9	18:54	13.6	0:53	2.2	13:35	1.2
11	Tu.	6:02	16.4	18:39	13.4	0:32	3.3	13:26	2.0	11	F.	6:52	16.2	19:21	14.2	1:34	2.0	14:11	1.3
12	W.	6:36	16.4	19:15	13.5	1:14	3.2	14:04	2.1	12	Sa.	7:23	16.5	19:47	14.8	2:14	1.9	14:46	1.5
13	Th.	7:09	16.5	19:47	13.6	1:54	3.1	14:40	2.1	13	☿.	7:56	16.6	20:16	15.5	2:54	1.8	15:22	1.6
14	F.	7:41	16.6	20:17	13.9	2:33	3.0	15:15	2.2	14	M.	8:33	16.4	20:49	16.0	3:35	1.8	15:59	1.7
15	Sa.	8:14	16.5	20:46	14.2	3:13	2.8	15:50	2.1	15	Tu.	9:15	15.9	21:28	16.2	4:18	1.9	16:38	1.9
16	☿.	8:51	16.3	21:19	14.6	3:54	2.6	16:27	2.2	16	W.	10:03	14.9	22:18	16.0	5:05	2.2	17:20	2.3
17	M.	9:34	15.9	22:04	14.9	4:39	2.6	17:07	2.3	17	Th.	11:00	13.7	23:20	15.5	5:59	2.6	18:08	2.7
18	Tu.	10:27	15.2	22:58	15.0	5:28	2.7	17:51	2.5	18	F.	.....	12:09	12.4	7:03	3.1	19:07	3.2	
19	W.	11:31	14.2	23:59	15.0	6:23	2.9	18:41	2.8	19	Sa.	0:32	15.0	13:34	11.7	8:16	3.2	20:16	3.4
20	Th.	.....	12:42	13.5	7:25	3.2	19:39	3.1	20	☿.	1:52	14.9	14:53	11.8	9:35	2.7	21:30	3.3	
21	F.	1:09	15.2	13:56	13.1	8:34	3.2	20:40	3.3	21	M.	3:06	15.4	15:58	12.5	10:45	1.8	22:41	2.7
22	Sa.	2:18	15.8	15:01	13.2	9:47	2.9	21:52	3.3	22	Tu.	4:07	16.0	16:53	13.5	11:44	0.9	23:42	1.9
23	☿.	3:19	16.6	16:07	13.6	10:55	2.2	22:56	2.9	23	W.	5:00	16.8	17:40	14.4	.....	.....	13:34	0.4
24	M.	4:15	17.4	17:01	14.2	11:57	1.5	23:54	2.5	24	Th.	5:47	17.3	18:24	15.3	0:35	1.3	13:19	0.2
25	Tu.	5:09	18.0	17:51	14.7	.....	.....	12:52	0.9	25	F.	6:33	17.5	19:06	15.9	1:23	0.9	14:01	0.3
26	W.	6:00	18.4	18:38	15.1	0:48	2.1	13:39	0.6	26	Sa.	7:19	17.4	19:46	16.4	2:08	0.8	14:41	0.7
27	Th.	6:49	18.4	19:24	15.5	1:38	1.8	14:23	0.6	27	☿.	8:06	16.9	20:27	16.4	2:51	1.0	15:19	1.1
28	F.	7:36	18.2	20:09	15.6	2:26	1.6	15:05	0.8	28	M.	8:53	16.1	21:10	16.2	3:34	1.3	15:56	1.6
29	Sa.	8:23	17.5	20:55	15.6	3:13	1.6	15:46	1.1	29	Tu.	9:41	15.0	21:56	15.7	4:18	1.7	16:32	2.0
30	☿.	9:11	16.6	21:44	15.4	3:59	1.7	16:27	1.5	30	W.	10:31	13.7	22:46	14.9	5:04	2.1	17:09	2.4
31	M.	10:05	15.5	22:39	15.0	4:46	2.0	17:09	2.0	31	Th.	11:26	12.3	23:43	14.0	5:53	2.6	17:50	2.8

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LÉVIS DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 7.7 feet to the height of High water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.

## TIDE TABLES.—QUEBEC.—1911.

Date.	Day.	SEPTEMBER.				Date.	Day.	OCTOBRE.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	F.	.....	12:30 11'2	6:46 2'9	18:40 3'1	1	\$.	.....	13:10 10'3	7:04 2'9	19:02 3'3
2	Sa.	0:48 13'3	13:41 10'7	7:47 3'0	19:40 3'3	2	M.	1:14 12'7	14:19 10'6	8:10 2'7	20:10 3'2
3	\$.	2:00 13'0	14:50 10'9	8:56 2'7	20:48 3'2	3	Tu.	2:26 12'9	15:18 11'4	9:15 2'2	21:17 2'7
4	M.	3:05 13'3	15:50 11'4	10:05 2'1	21:57 2'8	4	W.	3:25 13'6	16:07 12'4	10:14 1'6	22:17 2'1
5	Tu.	4:00 13'9	16:40 12'1	11:03 1'4	22:57 2'2	5	Th.	4:14 14'4	16:47 13'6	11:05 1'1	23:11 1'6
6	W.	4:46 14'6	17:21 13'0	11:50 1'0	23:47 1'7	6	F.	4:54 15'3	17:19 14'8	11:48 1'0	.....
7	Th.	5:23 15'3	17:54 13'8	.....	12:29 0'8	7	Sa.	5:31 16'0	17:49 15'9	0:00 1'2	12:28 1'0
8	F.	5:57 15'9	18:22 14'6	0:30 1'4	13:04 0'8	8	\$.	6:06 16'5	18:18 16'9	0:46 1'0	13:07 1'3
9	Sa.	6:29 16'3	18:49 15'4	1:10 1'3	13:38 1'0	9	M.	6:40 16'7	18:48 17'9	1:31 1'0	13:45 1'6
10	\$.	7:02 16'6	19:17 16'3	1:50 1'2	14:13 1'3	10	Tu.	7:14 16'6	19:22 18'5	2:15 1'2	14:24 1'9
11	M.	7:36 16'7	19:48 17'1	2:31 1'3	14:49 1'5	11	W.	7:50 16'2	20:00 18'7	3:00 1'5	15:05 2'2
12	Tu.	8:12 16'4	20:23 17'5	3:13 1'4	15:26 1'8	12	Th.	8:32 15'4	20:44 18'2	3:46 1'8	15:48 2'5
13	W.	8:52 15'7	21:04 17'5	3:57 1'7	16:05 2'1	13	F.	9:21 14'2	21:35 17'2	4:35 2'2	16:34 2'9
14	Th.	9:41 14'6	21:54 16'8	4:46 2'1	16:49 2'5	14	Sa.	10:18 12'7	22:36 15'8	5:31 2'6	17:26 3'4
15	F.	10:40 13'1	22:53 15'8	5:44 2'6	17:41 3'0	15	\$.	11:34 11'5	23:50 14'5	6:34 2'9	18:31 3'7
16	Sa.	11:51 11'6	.....	6:53 3'0	18:44 3'5	16	M.	.....	13:06 11'2	7:46 2'9	19:52 3'7
17	\$.	0:05 14'6	13:17 10'9	8:05 3'1	20:02 3'7	17	Tu.	1:22 13'9	14:27 11'7	8:57 2'4	21:08 3'2
18	M.	1:32 14'1	14:37 11'3	9:19 2'5	21:21 3'2	18	W.	2:41 14'2	15:30 13'0	10:01 1'7	22:13 2'3
19	Tu.	2:53 14'5	15:46 12'4	10:28 1'6	22:32 2'4	19	Th.	3:42 14'9	16:19 14'3	10:54 1'1	23:10 1'4
20	W.	3:56 15'3	16:41 13'7	11:25 0'8	23:31 1'5	20	F.	4:33 15'5	17:01 15'6	11:42 0'9	.....
21	Th.	4:50 16'1	17:27 14'9	.....	12:14 0'4	21	Sa.	5:16 15'9	17:40 16'5	0:02 0'9	12:24 1'1
22	F.	5:38 16'6	18:09 15'9	0:22 0'9	12:56 0'4	22	\$.	5:58 16'0	18:18 17'1	0:50 0'8	13:03 1'6
23	Sa.	6:23 16'8	18:47 16'7	1:08 0'6	13:34 0'7	23	M.	6:39 15'8	18:55 17'4	1:33 1'1	13:40 2'1
24	\$.	7:06 16'6	19:24 17'0	1:51 0'7	14:09 1'2	24	Tu.	7:20 15'3	19:31 17'3	2:14 1'5	14:15 2'6
25	M.	7:47 16'2	20:01 17'1	2:33 1'1	14:43 1'8	25	W.	8:02 14'7	20:06 17'0	2:54 2'0	14:49 2'9
26	Tu.	8:27 15'4	20:38 16'8	3:14 1'5	15:17 2'2	26	Th.	8:46 13'9	20:42 16'4	3:33 2'3	15:23 3'0
27	W.	9:08 14'4	21:16 16'2	3:54 1'9	15:52 2'5	27	F.	9:33 12'9	21:21 15'6	4:12 2'5	15:58 3'0
28	Th.	9:51 13'3	21:56 15'3	4:35 2'3	16:29 2'7	28	Sa.	10:23 11'9	22:09 14'6	4:53 2'6	16:39 3'0
29	F.	10:40 12'0	22:44 14'2	5:17 2'6	17:10 2'8	29	\$.	11:19 11'0	23:08 13'6	5:38 2'7	17:30 3'0
30	Sa.	11:48 10'9	23:50 13'2	6:05 2'8	18:00 3'0	30	M.	.....	12:23 10'6	6:30 2'7	18:30 3'1
						31	Tu.	0:18 12'9	13:33 10'9	7:27 2'5	19:36 3'1

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LÉVIS DRY DOCK.—To find the depth of water or the sill of this dock at any tide, add 7'7 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.



NOVEMBER.								DECEMBER.							
Date.	Day.	HIGH WATER.		LOW WATER.		Date.	Day.	HIGH WATER.		LOW WATER.		Date.	Day.	HIGH WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.
1	W.	1:36 12.9	14:33 11.8	8:27 2.3	20:43 2.7	1	F.	1:52 13.4	14:28 13.4	8:32 2.2	21:05 2.3				
2	Th.	2:45 13.5	15:24 13.0	9:25 1.9	21:45 2.2	2	Sa.	2:55 13.9	15:15 14.9	9:29 2.1	22:06 1.9				
3	F.	3:40 14.4	16:06 14.3	10:13 1.6	22:42 1.7	3	§	3:45 14.5	16:00 16.1	10:25 2.0	23:04 1.6				
4	Sa.	4:23 15.2	16:40 15.7	11:07 1.5	23:33 1.3	4	M.	4:23 15.0	16:42 17.4	11:19 1.9	.....				
5	§.	5:01 15.8	17:12 17.0	11:52 1.5	.....	5	Tu.	5:09 15.4	17:23 18.3	0:00 1.3	12:09 2.0				
6	M.	5:38 16.3	17:45 18.1	0:21 1.2	12:34 1.7	6	W.	5:49 15.5	18:04 19.0	0:52 1.2	12:57 2.1				
7	Tu.	6:15 16.4	18:21 18.9	1:07 1.2	13:15 2.0	7	Th.	6:33 15.4	18:47 19.2	1:42 1.1	13:44 2.2				
8	W.	6:53 16.3	19:01 19.3	1:53 1.3	13:57 2.2	8	F.	7:20 15.1	19:32 18.9	2:31 1.1	14:31 2.2				
9	Th.	7:34 15.7	19:44 19.1	2:40 1.5	14:42 2.4	9	Sa.	8:10 14.6	20:21 18.1	3:20 1.2	15:19 2.2				
10	F.	8:19 15.0	20:31 18.4	3:29 1.7	15:31 2.6	10	§.	9:04 14.1	21:17 17.1	4:10 1.3	16:09 2.3				
11	Sa.	9:12 13.9	21:22 17.3	4:22 1.9	16:21 2.9	11	M.	10:15 13.5	22:21 15.8	5:01 1.5	17:02 2.4				
12	§.	10:14 12.8	22:24 15.8	5:18 2.2	17:22 3.2	12	Tu.	11:14 13.0	23:34 14.5	5:53 1.8	18:03 2.6				
13	M.	11:27 12.0	23:44 14.6	6:17 2.4	18:27 3.4	13	W.	.....	12:25 12.9	6:47 2.1	19:09 2.7				
14	Tu.	.....	12:51 11.9	7:19 2.5	19:36 3.3	14	Th.	0:48 13.7	13:31 13.3	7:44 2.3	20:16 2.6				
15	W.	1:10 13.9	14:03 12.6	8:24 2.3	20:46 2.9	15	F.	1:59 13.4	14:30 13.9	8:42 2.4	21:22 2.3				
16	Th.	2:20 13.9	15:04 13.7	9:27 2.0	21:54 2.2	16	Sa.	3:02 13.4	15:22 14.7	9:39 2.4	22:23 1.8				
17	F.	3:21 14.4	15:55 14.9	10:23 1.7	22:53 1.6	17	§.	3:52 13.5	16:07 15.4	10:32 2.4	23:18 1.5				
18	Sa.	4:14 14.7	16:38 15.9	11:13 1.7	23:42 1.2	18	M.	4:37 13.6	16:49 15.9	11:19 2.5	.....				
19	§.	5:00 15.0	17:16 16.6	11:57 1.9	.....	19	Tu.	5:20 13.6	17:29 16.1	0:07 1.3	12:03 2.6				
20	M.	5:42 14.9	17:53 16.9	0:27 1.2	12:34 2.3	20	W.	6:01 13.5	18:07 16.2	0:51 1.4	12:44 2.8				
21	Tu.	6:21 14.7	18:29 17.0	1:09 1.5	13:09 2.7	21	Th.	6:40 13.2	18:43 16.1	1:31 1.6	13:23 2.9				
22	W.	6:59 14.3	19:04 16.9	1:49 1.8	13:44 3.1	22	F.	7:18 13.0	19:18 15.9	2:09 1.8	14:01 2.9				
23	Th.	7:37 13.8	19:39 16.6	2:28 2.2	14:20 3.2	23	Sa.	7:55 12.7	19:53 15.7	2:46 1.9	14:39 2.8				
24	F.	8:16 13.2	20:15 16.1	3:06 2.4	14:58 3.2	24	§.	8:31 12.6	20:29 15.5	3:22 1.9	15:18 2.6				
25	Sa.	8:56 12.6	20:53 15.6	3:45 2.4	15:38 3.1	25	M.	9:06 12.6	21:07 15.1	3:59 1.9	15:58 2.3				
26	§.	9:38 12.1	21:34 14.9	4:25 2.4	16:21 2.9	26	Tu.	9:43 12.6	21:49 14.6	4:37 1.8	16:40 2.2				
27	M.	10:24 11.7	22:24 14.1	5:07 2.3	17:08 2.8	27	W.	10:26 12.7	22:43 14.0	5:17 1.7	17:27 2.1				
28	Tu.	11:18 11.4	23:27 13.4	5:52 2.3	17:59 2.7	28	Th.	11:18 12.9	23:44 13.4	6:00 1.8	18:22 2.2				
29	W.	.....	12:27 11.6	6:41 2.3	18:56 2.7	29	F.	.....	12:18 13.2	6:49 2.0	19:23 2.4				
30	Th.	0:39 13.2	13:35 12.3	7:36 2.2	20:00 2.6	30	Sa.	0:54 13.0	13:20 13.9	7:44 2.1	20:29 2.4				
						31	§.	2:02 13.1	14:21 14.8	8:42 2.3	21:36 2.2				

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the Datum for the soundings on the Admiralty chart of Quebec harbour.

LEVIS DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 7.7 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Quebec, are given on page 6; and a table showing the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.

Date.	Day.	APRIL.								Date.	Day.	MAY.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.			
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.
1	Sa.	3:07	14'1	15:35	13'1	9:23	0'5	21:32	1'2	1	M.	3:20	15'3	16:01	12'1	9:55	0'7	21:50	2'0
2	S.	3:45	14'3	16:18	12'4	10:06	0'7	22:10	1'6	2	Tu.	4:06	15'1	16:50	11'3	10:44	1'4	22:33	2'7
3	M.	4:28	14'3	17:05	11'5	10:55	1'3	22:53	2'3	3	W.	4:58	14'4	17:44	10'4	11:39	2'3	23:20	3'6
4	Tu.	5:17	13'8	17:57	10'4	11:51	2'2	23:42	3'2	4	Th.	5:56	13'4	18:49	9'7	.....	.....	12:46	3'1
5	W.	6:13	13'1	18:58	9'4	.....	.....	12:56	3'1	5	F.	7:01	12'4	20:02	9'3	0:18	4'4	14:00	3'7
6	Th.	7:19	12'2	20:17	8'8	0:39	4'1	14:16	3'8	6	Sa.	8:16	11'5	21:25	9'5	1:41	4'9	15:19	3'9
7	F.	8:36	11'7	21:49	8'8	1:53	4'8	15:45	3'9	7	S.	9:35	11'1	22:32	10'2	3:17	4'9	16:30	3'8
8	Sa.	9:59	11'4	23:08	9'5	3:34	4'9	17:02	3'6	8	M.	10:49	11'1	23:27	11'0	4:37	4'4	17:24	3'6
9	S.	11:13	11'7	.....	.....	4:53	4'3	18:00	3'1	9	Tu.	11:50	11'2	.....	.....	5:40	3'7	18:05	3'4
10	M.	0:06	10'4	12:15	12'0	5:56	3'5	18:44	2'7	10	W.	0:11	11'9	12:38	11'4	6:30	3'0	18:40	3'2
11	Tu.	0:48	11'3	13:04	12'3	6:49	2'6	19:19	2'4	11	Th.	0:50	12'6	13:19	11'5	7:10	2'5	19:12	3'0
12	W.	1:23	12'2	13:42	12'5	7:33	1'9	19:50	2'2	12	F.	1:26	13'2	13:56	11'5	7:47	2'2	19:42	2'9
13	Th.	1:57	13'0	14:17	12'5	8:12	1'5	20:20	2'2	13	Sa.	2:00	13'7	14:30	11'5	8:23	2'2	20:11	3'0
14	F.	2:30	13'4	14:51	12'2	8:49	1'4	20:49	2'3	14	S.	2:33	14'0	15:03	11'3	8:58	2'3	20:41	3'1
15	Sa.	3:03	13'7	15:25	11'9	9:24	1'6	21:17	2'5	15	M.	3:06	13'9	15:37	10'9	9:33	2'6	21:13	3'4
16	S.	3:37	13'6	15:59	11'3	9:59	2'1	21:45	2'9	16	Tu.	3:40	13'7	16:12	10'4	10:09	3'0	21:47	3'9
17	M.	4:12	13'3	16:34	10'6	10:35	2'7	22:14	3'5	17	W.	4:16	13'2	16:50	9'9	10:48	3'6	22:25	4'4
18	Tu.	4:49	12'8	17:12	9'8	11:13	3'5	22:45	4'2	18	Th.	4:56	12'6	17:38	9'3	11:33	4'1	23:09	5'0
19	W.	5:28	12'0	17:57	9'1	11:58	4'3	23:25	4'9	19	F.	5:41	11'9	18:35	9'0	.....	.....	12:24	4'6
20	Th.	6:11	11'3	18:56	8'4	.....	.....	12:55	5'0	20	Sa.	6:33	11'2	19:38	8'9	0:01	5'4	13:23	4'8
21	F.	7:05	10'7	20:10	8'2	0:18	5'6	14:05	5'3	21	S.	7:36	10'8	20:41	9'2	1:05	5'7	14:27	4'8
22	Sa.	8:19	10'3	21:30	8'4	1:32	6'0	15:32	5'2	22	M.	8:47	10'7	21:43	9'9	2:26	5'6	15:31	4'5
23	S.	9:36	10'4	22:39	9'1	3:01	5'9	16:39	4'7	23	Tu.	9:52	10'8	22:37	10'9	3:45	5'0	16:26	4'0
24	M.	10:40	10'8	23:29	10'1	4:24	5'2	17:26	4'0	24	W.	10:51	11'1	23:24	12'0	4:52	4'1	17:13	3'4
25	Tu.	11:34	11'4	.....	.....	5:27	4'1	18:06	3'3	25	Th.	11:46	11'5	.....	.....	5:46	3'1	17:57	2'9
26	W.	0:10	11'3	12:23	12'0	6:15	3'1	18:44	2'6	26	F.	0:09	13'3	12:37	11'9	6:36	2'2	18:39	2'4
27	Th.	0:48	12'5	13:09	12'6	7:00	2'0	19:21	1'9	27	Sa.	0:53	14'4	13:26	12'2	7:24	1'4	19:20	2'0
28	F.	1:25	13'7	13:52	12'9	7:44	1'2	19:57	1'5	28	S.	1:37	15'3	14:14	12'2	8:11	0'9	20:01	1'9
29	Sa.	2:01	14'6	14:34	12'9	8:27	0'6	20:33	1'4	29	M.	2:22	15'8	15:02	12'1	8:58	0'8	20:43	1'9
30	S.	2:39	15'2	15:16	12'7	9:10	0'5	21:10	1'5	30	Tu.	3:08	15'8	15:51	11'8	9:46	1'0	21:28	2'3
										31	W.	3:56	15'4	16:41	11'3	10:36	1'5	22:18	2'9

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides.

TIDAL DIFFERENCES for the St. Lawrence estuary and Chaleur bay are given on page 6, and for the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.



JUNE.						JULY.													
Date.	Day.	HIGH WATER.		LOW WATER.		Date.	Day.	HIGH WATER.		LOW WATER.									
		Time.	H't.	Time.	H't.			Time.	H't.	Time.	H't.								
H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.										
1	Th.	4:47	14.7	17:34	10.8	11:29	2.2	23:14	3.6	1	Sa.	5:31	13.6	18:09	11.1	11:59	2.6	.....	
2	F.	5:43	13.6	18:33	10.3	.....	.....	12:26	2.9	2	S.	6:23	12.4	19:04	10.9	0:00	3.6	12:49	3.3
3	Sa.	6:44	12.5	19:38	10.1	0:16	4.2	13:30	3.5	3	M.	7:18	11.3	20:03	10.8	0:58	4.1	13:41	3.9
4	S.	7:51	11.5	20:46	10.3	1:28	4.6	14:35	3.9	4	Tu.	8:19	10.3	21:03	10.9	2:09	4.6	14:35	4.3
5	M.	9:04	10.8	21:52	10.7	2:48	4.8	15:36	4.1	5	W.	9:26	9.7	22:02	11.2	3:28	4.8	15:30	4.6
6	Tu.	10:12	10.4	22:50	11.2	4:07	4.5	16:30	4.2	6	Th.	10:32	9.3	22:57	11.6	4:40	4.7	16:24	4.7
7	W.	11:13	10.3	23:37	11.9	5:13	4.1	17:16	4.1	7	F.	11:32	9.3	23:47	12.1	5:39	4.4	17:16	4.7
8	Th.	.....	12:04	10.4	6:07	3.7	17:56	4.0	.....	8	Sa.	.....	.....	12:25	9.5	6:30	4.1	18:04	4.6
9	F.	0:17	12.6	12:48	10.5	6:51	3.4	18:34	3.9	9	S.	0:31	12.7	13:10	9.8	7:14	3.8	18:47	4.3
10	Sa.	0:55	13.1	13:28	10.6	7:30	3.1	19:11	3.8	10	M.	1:12	13.1	13:50	10.1	7:53	3.5	19:27	4.1
11	S.	1:32	13.6	14:05	10.7	8:07	2.9	19:47	3.7	11	Tu.	1:50	13.5	14:27	10.4	8:29	3.2	20:04	3.8
12	M.	2:08	13.9	14:41	10.7	8:43	2.9	20:22	3.6	12	W.	2:26	13.7	15:03	10.6	9:04	2.9	20:40	3.6
13	T.	2:45	13.9	15:17	10.6	9:19	2.9	20:57	3.7	13	Th.	3:03	13.8	15:38	10.7	9:38	2.8	21:16	3.4
14	W.	3:23	13.8	15:54	10.4	9:56	3.1	21:33	3.9	14	F.	3:40	13.6	16:13	10.8	10:13	2.8	21:54	3.4
15	Th.	4:01	13.5	16:33	10.1	10:34	3.3	22:11	4.1	15	Sa.	4:18	13.3	16:50	10.8	10:49	2.8	22:35	3.4
16	F.	4:40	13.0	17:15	9.9	11:14	3.6	22:53	4.4	16	S.	4:57	12.9	17:32	10.9	11:27	2.9	23:22	3.6
17	Sa.	5:22	12.5	18:02	9.8	11:57	3.8	23:43	4.7	17	M.	5:39	12.2	18:19	11.0	.....	.....	12:07	3.2
18	S.	6:10	11.8	18:56	9.9	.....	.....	12:44	4.0	18	Tu.	6:28	11.5	19:11	11.2	0:16	3.9	12:49	3.4
19	M.	7:06	11.2	19:52	10.2	0:43	4.9	13:36	4.1	19	W.	7:27	10.8	20:08	11.5	1:17	4.1	13:36	3.7
20	Tu.	8:07	10.8	20:50	10.7	1:52	4.9	14:33	4.1	20	Th.	8:32	10.2	21:10	12.0	2:26	4.2	14:33	3.9
21	W.	9:11	10.6	21:50	11.5	3:04	4.6	15:31	3.9	21	F.	9:39	9.9	22:13	12.6	3:40	4.1	15:38	3.9
22	Th.	10:16	10.6	22:48	12.5	4:14	4.1	16:26	3.6	22	Sa.	10:47	9.8	23:14	13.3	4:58	3.7	16:46	3.7
23	F.	11:16	10.7	23:41	13.6	5:16	3.4	17:17	3.3	23	S.	11:55	10.1	.....	.....	6:08	3.0	17:49	3.4
24	Sa.	.....	12:12	11.0	6:13	2.6	18:07	2.9	.....	24	M.	0:14	14.1	12:58	10.7	7:06	2.3	18:48	2.9
25	S.	0:30	14.6	13:05	11.3	7:07	1.9	18:56	2.6	25	Tu.	1:11	14.9	13:52	11.2	7:56	1.7	19:38	2.3
26	M.	1:19	15.3	13:56	11.6	7:58	1.4	19:44	2.2	26	W.	2:04	15.3	14:39	11.7	8:42	1.2	20:27	1.9
27	Tu.	2:09	15.8	14:46	11.7	8:48	1.1	20:33	2.1	27	Th.	2:53	15.3	15:25	12.1	9:26	1.1	21:15	1.8
28	W.	3:00	15.8	15:35	11.7	9:37	1.1	21:23	2.2	28	F.	3:39	15.0	16:10	12.2	10:08	1.3	22:03	1.9
29	Th.	3:50	15.3	16:25	11.6	10:25	1.4	22:14	2.6	29	Sa.	4:24	14.3	16:54	12.1	10:48	1.7	22:52	2.2
30	F.	4:40	14.6	17:16	11.4	11:12	1.9	23:06	3.0	30	S.	5:09	13.3	17:39	11.9	11:28	2.3	23:41	2.8
										31	M.	5:55	12.1	18:25	11.6	.....	.....	12:09	3.0

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides.

TIDAL DIFFERENCES for the St. Lawrence estuary and Chaleur bay are given on page 6, and for the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.

Date.	Day.	AUGUST.								Date.	Day.	SEPTEMBER.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.		Time. H't.	
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	
1	Tu.	6:43	10 9	19:15	11 2	0:32	3 6	12:52	3 8	1	F.	7:46	8 7	20:22	10 6	1:50	5 1	13:30	5 2
2	W.	7:34	9 9	20:13	11 0	1:30	4 3	13:38	4 4	2	Sa.	9:00	8 2	21:34	10 5	3:26	5 6	14:40	5 8
3	Th.	8:32	9 0	21:14	10 9	2:40	4 9	14:30	5 0	3	S	10:32	8 1	22:50	10 7	5:00	5 5	16:04	5 8
4	F.	9:44	8 6	22:16	11 0	4:01	5 2	15:34	5 3	4	M.	11:50	8 6	23:51	11 2	6:04	4 9	17:20	5 4
5	Sa.	11:00	8 6	23:16	11 4	5:20	5 1	16:38	5 3	5	Tu.	.....	12:38	9 2	6:45	4 3	18:14	4 7	
6	S	.....	12:04	8 8	6:22	4 7	17:38	5 1	6	W.	0:39	11 9	13:14	10 0	7:18	3 6	18:57	3 9	
7	M.	0:10	11 9	12:56	9 3	7:06	4 2	18:31	4 7	7	Th.	1:18	12 5	13:46	10 8	7:46	3 0	19:35	3 1
8	Tu.	0:58	12 5	13:39	9 8	7:44	3 7	19:16	4 1	8	F.	1:54	13 0	14:17	11 6	8:13	2 4	20:11	2 3
9	W.	1:39	13 0	14:13	10 4	8:17	3 1	19:56	3 6	9	Sa.	2:29	13 4	14:47	12 2	8:42	1 9	20:47	1 7
10	Th.	2:16	13 4	14:44	10 9	8:48	2 7	20:32	3 0	10	S	3:03	13 6	15:18	12 8	9:12	1 6	21:24	1 4
11	F.	2:49	13 6	15:14	11 3	6:18	2 3	21:07	2 6	11	M.	3:37	13 4	15:52	13 2	9:43	1 6	22:03	1 4
12	Sa.	3:21	13 7	15:46	11 7	9:48	2 1	21:43	2 3	12	Tu.	4:12	12 9	16:31	13 4	10:18	1 8	22:44	1 7
13	S	3:54	13 5	16:21	11 9	10:19	2 0	22:21	2 3	13	W.	4:51	12 1	17:16	13 3	10:56	2 2	23:33	2 3
14	M.	4:30	13 0	17:00	12 0	10:52	2 2	23:03	2 5	14	Th.	5:39	11 2	18:08	13 0	11:37	2 8	.....	
15	Tu.	5:13	12 3	17:44	12 1	11:27	2 5	23:53	2 9	15	F.	6:37	10 2	19:10	12 5	0:31	3 1	12:26	3 6
16	W.	6:02	11 5	18:33	12 1	.....	.....	12:08	2 9	16	Sa.	7:46	9 2	20:21	12 1	1:43	3 9	13:26	4 3
17	Th.	6:59	10 6	19:29	12 1	0:52	3 5	12:57	3 5	17	S	9:05	8 9	21:38	12 0	3:14	4 2	14:58	4 7
18	F.	8:04	9 7	20:34	12 1	2:01	3 9	13:55	4 0	18	M.	10:30	9 1	22:54	12 2	4:43	3 9	16:28	4 4
19	Sa.	9:17	9 2	21:46	12 3	3:22	4 2	15:06	4 2	19	Tu.	11:45	9 8	23:59	12 8	5:50	3 3	17:37	3 7
20	S	10:37	9 2	23:04	12 8	4:44	3 9	16:28	4 1	20	W.	.....	12:41	10 8	6:44	2 6	18:34	2 8	
21	M.	11:52	9 7	.....	.....	5:57	3 2	17:44	3 6	21	Th.	0:54	13 3	13:23	11 8	7:26	2 1	19:22	1 9
22	Tu.	0:10	13 5	12:53	10 6	6:57	2 5	18:46	2 9	22	F.	1:41	13 6	14:02	12 6	8:02	1 7	20:07	1 3
23	W.	1:04	14 1	13:40	11 3	7:46	1 8	19:39	2 1	23	Sa.	2:24	13 6	14:40	13 3	8:35	1 6	20:49	1 0
24	Th.	1:52	14 5	14:23	12 1	8:26	1 4	20:26	1 5	24	S	3:04	13 4	15:17	13 6	9:07	1 7	21:30	1 1
25	F.	2:36	14 6	15:03	12 6	9:03	1 2	21:09	1 2	25	M.	3:42	12 9	15:53	13 6	9:39	2 0	22:11	1 6
26	Sa.	3:18	14 3	15:42	12 9	9:38	1 3	21:49	1 2	26	Tu.	4:19	12 1	16:30	13 3	10:11	2 5	22:52	2 3
27	S	3:59	13 7	16:20	12 9	10:12	1 7	22:29	1 6	27	W.	4:56	11 2	17:08	12 8	10:44	3 1	23:34	3 2
28	M.	4:39	12 8	16:59	12 7	10:46	2 2	23:10	2 4	28	Th.	5:34	10 3	17:48	12 0	11:18	3 9	.....	
29	Tu.	5:20	11 7	17:41	12 2	11:21	2 9	23:55	3 3	29	F.	6:15	9 3	18:34	11 2	0:18	4 2	11:54	4 7
30	W.	6:03	10 6	18:27	11 6	11:57	3 7	.....	.....	30	Sa.	7:08	8 6	19:31	10 6	1:14	5 1	12:38	5 5
31	Th.	6:50	9 5	19:19	11 0	0:46	4 2	12:38	4 5										

The TIME used is Eastern Standard, for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides.

TIDAL DIFFERENCES for the St. Lawrence estuary and Chaleur bay are given on page 6, and for the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.



Date.	Day.	OCTOBER.				Date.	Day.	NOVEMBER.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	S.	8:22 8'1	20:44 10'2	2:36 5'6	13:50 6'0	1	W.	10:19 9'1	22:25 10'5	4:16 4'9	16:08 5'4
2	M.	9:57 8'1	22:07 10'3	4:10 5'6	15:22 6'0	2	Th.	11:10 9'9	23:18 10'9	5:05 4'4	17:11 4'6
3	Tu.	11:16 8'7	23:14 10'8	5:21 5'0	16:50 5'5	3	F.	11:49 10'9	.....	5:41 3'8	17:59 3'6
4	W.	.....	12:03 9'5	6:04 4'4	17:48 4'7	4	Sa.	0:03 11'5	12:26 12'1	6:16 3'1	18:43 2'6
5	Th.	0:05 11'4	12:39 10'4	6:38 3'7	18:31 3'7	5	S.	0:46 12'0	13:02 13'2	6:51 2'5	19:24 1'7
6	F.	0:44 12'0	13:10 11'4	7:09 3'0	19:11 2'7	6	M.	1:28 12'4	13:38 14'2	7:27 2'0	20:05 1'1
7	Sa.	1:21 12'6	13:40 12'4	7:39 2'4	19:50 1'8	7	Tu.	2:09 12'6	14:17 14'9	8:05 1'7	20:47 0'8
8	S.	1:57 13'0	14:11 13'3	8:09 1'8	20:28 1'2	8	W.	2:51 12'5	15:01 15'3	8:44 1'7	21:32 0'9
9	M.	2:33 13'2	14:44 14'0	8:40 1'6	21:06 0'9	9	Th.	3:35 12'1	15:48 15'2	9:25 1'9	22:21 1'3
10	Tu.	3:10 13'0	15:21 14'4	9:12 1'5	21:47 0'9	10	F.	4:23 11'5	16:39 14'7	10:10 2'4	23:14 2'0
11	W.	3:49 12'6	16:02 14'5	9:47 1'8	22:32 1'4	11	Sa.	5:16 10'8	17:34 13'8	11:01 3'1	.....
12	Th.	4:34 11'8	16:50 14'2	10:27 2'3	23:22 2'1	12	S.	6:18 10'1	18:36 12'8	0:12 2'8	12:00 3'9
13	F.	5:25 10'9	17:43 13'5	11:12 3'0	.....	13	M.	7:28 9'7	18:46 11'9	1:20 3'4	13:12 4'5
14	Sa.	6:24 9'9	18:43 12'7	0:19 3'0	12:04 3'9	14	Tu.	8:40 9'7	21:02 11'3	2:36 3'8	14:36 4'7
15	S.	7:32 9'2	19:54 12'0	1:28 3'8	13:16 4'6	15	W.	9:50 10'2	22:11 11'1	3:50 3'8	16:00 4'3
16	M.	8:55 9'0	21:19 11'6	2:59 4'0	14:42 4'9	16	Th.	10:51 10'9	23:14 11'1	4:48 3'7	17:10 3'7
17	Tu.	10:17 9'5	22:34 11'7	4:25 3'8	16:13 4'4	17	F.	11:42 11'7	.....	5:35 3'5	18:06 3'0
18	W.	11:22 10'4	23:38 12'0	5:28 3'4	17:25 3'6	18	Sa.	0:09 11'2	12:24 12'5	6:14 3'3	18:51 2'5
19	Th.	.....	12:14 11'3	6:16 2'9	18:24 2'7	19	S.	0:55 11'3	13:04 13'2	6:50 3'1	19:32 2'2
20	F.	0:33 12'3	12:56 12'3	6:56 2'6	19:09 2'0	20	M.	1:35 11'3	13:43 13'7	7:25 3'0	20:11 2'1
21	Sa.	1:19 12'5	13:33 13'1	7:29 2'4	19:51 1'5	21	Tu.	2:12 11'3	14:21 14'0	7:59 3'0	20:49 2'2
22	S.	1:58 12'5	14:08 13'7	8:00 2'2	20:30 1'3	22	W.	2:49 11'1	14:57 14'0	8:33 3'1	21:26 2'4
23	M.	2:34 12'4	14:42 14'0	8:31 2'3	21:08 1'5	23	Th.	3:27 10'9	15:33 13'7	9:08 3'3	22:03 2'8
24	Tu.	3:09 12'0	15:17 14'0	9:00 2'5	21:45 1'9	24	F.	4:07 10'5	16:10 13'2	9:44 3'7	22:41 3'3
25	W.	3:44 11'5	15:53 13'6	9:31 2'9	22:22 2'6	25	Sa.	4:48 10'0	16:49 12'6	10:23 4'1	23:22 3'9
26	Th.	4:20 10'8	16:31 13'1	10:03 3'4	23:01 3'4	26	S.	5:32 9'5	17:31 11'9	11:05 4'7	.....
27	F.	5:00 10'1	17:12 12'4	10:37 4'1	23:44 4'1	27	M.	6:21 9'1	18:19 11'2	0:08 4'3	11:53 5'1
28	Sa.	5:46 9'3	18:00 11'5	11:17 4'8	.....	28	Tu.	7:17 9'0	19:18 10'6	1:00 4'6	12:52 5'5
29	S.	6:41 8'7	18:56 10'8	0:36 4'8	12:09 5'5	29	W.	8:20 9'1	20:27 10'3	2:00 4'7	14:02 5'5
30	M.	7:52 8'4	20:03 10'3	1:46 5'3	13:20 6'0	30	Th.	9:21 9'6	21:34 10'3	3:01 4'6	15:16 5'1
31	Tu.	9:10 8'5	21:19 10'2	3:04 5'3	14:46 6'0						

The TIME used is Eastern Standard for the 75th Meridian, which is five hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides.

TIDAL DIFFERENCES for the St. Lawrence estuary and Chaleur bay are given on page 6, and for the turn of the TIDAL STREAMS on the St. Lawrence, on page 8.

## APRIL.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	Sa.	H. 9 35	M. 22 05	H. 5 52	M. 18 23	
2	S.	10 13	22 47	6 32	19 10	
3	M.	10 56	23 34	7 13	20 00	
4	Tu.	11 45		7 57	20 54	
5	W.	0 28	12 39	8 47	21 53	
6	Th.	1 34	13 46	9 47	22 59	D
7	F.	2 56	15 10	10 58		
8	Sa.	4 23	16 36	0 11	12 14	
9	S.	5 34	17 44	1 20	13 26	
10	M.	6 32	18 42	2 19	14 31	
11	Tu.	7 17	19 31	3 10	15 27	
12	W.	7 56	20 12	3 54	16 15	
13	Th.	8 30	20 51	4 33	16 56	O
14	F.	9 03	21 29	5 09	17 35	
15	Sa.	9 35	22 06	5 43	18 13	
16	S.	10 08	22 43	6 16	18 50	
17	M.	10 42	23 21	6 48	19 28	
18	Tu.	11 19		7 21	20 07	
19	W.	0 01	11 59	7 58	20 49	
20	Th.	0 49	12 46	8 41	21 37	
21	F.	1 52	13 44	9 33	22 33	C
22	Sa.	3 10	15 03	10 35	23 35	
23	S.	4 24	16 27	11 44		
24	M.	5 25	17 34	0 38	12 52	
25	Tu.	6 13	18 21	1 40	13 53	
26	W.	6 53	19 04	2 33	14 49	
27	Th.	7 28	19 45	3 20	15 41	
28	F.	8 02	20 24	4 04	16 31	⊕
29	Sa.	8 36	21 03	4 46	17 20	
30	S.	9 12	21 43	5 27	18 08	

## MAY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	M.	H. 9 51	M. 22 27	H. 6 09	M. 18 56	
2	Tu.	10 33	23 16	6 53	19 45	
3	W.	11 23		7 42	20 36	
4	Th.	0 14	12 24	8 37	21 33	
5	F.	1 23	13 36	9 39	22 35	D
6	Sa.	2 46	14 58	10 46	23 43	
7	S.	4 07	16 19	11 57		
8	M.	5 12	17 28	0 51	13 06	
9	Tu.	6 04	18 23	1 50	14 07	
10	W.	6 49	19 08	2 39	15 02	
11	Th.	7 29	19 50	3 22	15 50	
12	F.	8 06	20 31	4 01	16 33	
13	Sa.	8 40	21 10	4 37	17 14	O
14	S.	9 12	21 47	5 13	17 53	
15	M.	9 44	22 22	5 48	18 30	
16	Tu.	10 17	22 57	6 23	19 06	
17	W.	10 51	23 33	6 59	19 43	
18	Th.	11 28		7 37	20 22	
19	F.	0 12	12 10	8 18	21 05	
20	Sa.	1 01	13 05	9 05	21 56	
21	S.	2 09	14 16	10 02	22 53	C
22	M.	3 24	15 37	11 07	23 52	
23	Tu.	4 31	16 47		12 15	
24	W.	5 20	17 44	0 51	13 21	
25	Th.	6 06	18 33	1 48	14 21	
26	F.	6 48	19 18	2 42	15 17	
27	Sa.	7 28	20 02	3 32	16 10	
28	S.	8 09	20 46	4 18	17 02	⊕
29	M.	8 51	21 31	5 03	17 53	
30	Tu.	9 35	22 18	5 49	18 43	
31	W.	10 23	23 09	6 37	19 33	

## JUNE.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	Th.	H. 11 17	M. ....	H. 7 27	M. 20 24	
2	F.	0 10	12 16	8 20	21 16	
3	Sa.	1 16	13 25	9 17	22 09	D
4	S.	2 26	14 37	10 19	23 05	
5	M.	3 37	15 53	11 26		
6	Tu.	4 42	17 04	0 04	12 34	
7	W.	5 37	18 03	1 01	13 37	
8	Th.	6 22	18 52	1 51	14 34	
9	F.	7 01	19 33	2 37	15 24	
10	Sa.	7 38	20 11	3 20	16 10	
11	S.	8 14	20 48	4 01	16 53	O
12	M.	8 49	21 24	4 41	17 34	
13	Tu.	9 23	22 00	5 20	18 12	
14	W.	9 58	22 37	5 59	18 48	
15	Th.	10 33	23 13	6 39	19 24	
16	F.	11 09	23 50	7 20	20 02	
17	Sa.	11 48		8 02	20 43	
18	S.	0 29	12 35	8 47	21 28	
19	M.	1 18	13 36	9 38	22 18	C
20	Tu.	2 17	14 47	10 37	23 12	
21	W.	3 23	16 00	11 44		
22	Th.	4 28	17 03	0 07	12 52	
23	F.	5 23	18 00	1 03	13 56	
24	Sa.	6 13	18 51	1 59	14 56	
25	S.	7 02	19 41	2 55	15 54	
26	M.	7 50	20 32	3 51	16 49	⊕
27	Tu.	8 38	21 22	4 45	17 40	
28	W.	9 26	22 11	5 37	18 29	
29	Th.	10 15	23 01	6 27	19 17	
30	F.	11 06	23 53	7 16	20 04	

## JULY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	Sa.	H. 12 05	M. ....	H. 8 06	M. 20 51	
2	S.	0 50	13 07	8 57	21 39	
3	M.	1 49	14 14	9 50	22 28	D
4	Tu.	2 54	15 25	10 47	23 18	
5	W.	3 58	16 34	11 49		
6	Th.	4 58	17 32	0 10	12 58	
7	F.	5 50	18 23	1 03	14 03	
8	Sa.	6 36	19 11	1 57	15 01	
9	S.	7 19	19 55	2 49	15 50	
10	M.	7 59	20 35	3 36	16 33	
11	Tu.	8 36	21 13	4 19	17 13	O
12	W.	9 10	21 49	5 01	17 51	
13	Th.	9 43	22 21	5 41	18 27	
14	F.	10 15	22 51	6 20	19 02	
15	Sa.	10 48	23 20	7 00	19 37	
16	S.	11 25	23 53	7 41	20 14	
17	M.		24 08	8 26	20 54	
18	Tu.	0 38	13 01	9 15	21 38	
19	W.	1 32	14 05	10 10	22 28	C
20	Th.	2 33	15 16	11 12	23 26	
21	F.	3 43	16 30		12 21	
22	Sa.	4 52	17 40	0 27	13 34	
23	S.	5 53	18 41	1 39	14 42	
24	M.	6 49	19 35	2 43	15 44	
25	Tu.	7 43	20 25	3 41	16 39	⊕
26	W.	8 34	21 12	4 35	17 26	
27	Th.	9 23	21 58	5 25	18 10	
28	F.	10 10	22 43	6 13	18 52	
29	Sa.	10 57	23 29	7 00	19 33	
30	S.	11 45		7 46	20 14	
31	M.	0 18	12 39	8 33	20 56	

The Time used is Eastern Standard, for the 75th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

At Cap à la Roche, the lowest tides are not at the springs. The lowest low waters usually occur a few days after the Moon's quarters. See explanations and table on page 7.



## AUGUST.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	Tu.	1	13	13	42	9	22	21	39	☾
2	W.	2	14	14	46	10	15	22	24	
3	Th.	3	15	15	52	11	13	23	15	
4	F.	4	16	16	57	...	...	12	16	
5	Sa.	5	15	17	58	0	12	13	25	
6	S.	6	10	18	52	1	17	14	30	
7	M.	6	59	19	40	2	16	15	23	
8	Tu.	7	41	20	22	3	09	16	06	☾
9	W.	8	20	20	59	3	56	16	45	
10	Th.	8	55	21	30	4	40	17	22	
11	F.	9	28	21	57	5	21	17	58	
12	Sa.	9	59	22	23	6	01	18	33	
13	S.	10	32	22	52	6	41	19	09	
14	M.	11	09	23	25	7	22	19	46	
15	Tu.	11	51	...	...	8	05	20	25	
16	W.	0	04	12	39	8	52	21	07	☾
17	Th.	0	54	13	36	9	46	21	55	
18	F.	1	56	14	45	10	50	22	54	
19	Sa.	3	08	16	10	...	...	12	03	
20	S.	4	28	17	29	0	03	13	22	
21	M.	5	42	18	34	1	17	14	32	
22	Tu.	6	43	19	29	2	28	15	31	☾
23	W.	7	36	20	16	3	29	16	21	
24	Th.	8	23	21	00	4	22	17	06	
25	F.	9	09	21	42	5	10	17	43	
26	Sa.	9	55	22	22	5	55	18	28	
27	S.	10	42	23	03	6	38	19	06	
28	M.	11	29	23	46	7	21	19	43	
29	Tu.	...	...	12	17	8	05	20	19	
30	W.	0	32	13	07	8	51	20	56	☾
31	Th.	1	22	14	02	9	40	21	37	

## SEPTEMBER.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	F.	2	19	15	08	10	33	22	27	
2	Sa.	3	26	16	19	11	34	23	27	
3	S.	4	38	17	28			12	43	
4	M.	5	43	18	28	0	35	13	52	
5	Tu.	6	38	19	18	1	44	14	50	
6	W.	7	24	19	59	2	44	15	37	
7	Th.	8	01	20	32	3	34	16	16	
8	F.	8	35	21	00	4	17	16	51	○
9	Sa.	9	07	21	27	4	57	17	25	
10	S.	9	40	21	55	5	37	18	00	
11	M.	10	14	22	26	6	18	18	36	
12	Tu.	10	50	23	01	7	00	19	13	
13	W.	11	30	23	42	7	44	19	52	
14	Th.			12	19	8	33	20	36	
15	F.	0	32	13	18	9	31	21	28	☾
16	Sa.	1	31	14	29	10	40	22	31	
17	S.	2	43	15	55	11	52	23	49	
18	M.	4	10	17	15			13	06	
19	Tu.	5	31	18	24	1	08	14	15	
20	W.	6	34	19	19	2	19	15	12	
21	Th.	7	28	20	05	3	18	16	01	
22	F.	8	16	20	47	4	09	16	43	☽
23	Sa.	9	01	21	25	4	55	17	21	
24	S.	9	44	22	02	5	38	17	56	
25	M.	10	25	22	39	6	20	18	30	
26	Tu.	11	05	23	16	7	01	19	04	
27	W.	11	46	23	54	7	41	19	39	
28	Th.			12	29	8	22	20	16	
29	F.	0	34	13	18	9	04	20	57	☽
30	Sa.	1	22	14	26	9	52	21	47	

## OCTOBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	S.	2	28	15	50	10	51	22	49
2	M.	3	54	16	59	11	57	23	57
3	Tu.	5	06	17	58			13	02
4	W.	6	05	18	47	1	04	14	01
5	Th.	6	54	19	27	2	04	14	52
6	F.	7	34	19	59	2	58	15	35
7	Sa.	8	11	20	29	3	47	16	15
8	S.	8	46	20	58	4	33	16	54
9	M.	9	20	21	28	5	18	17	32
10	Tu.	9	54	22	02	6	02	18	11
11	W.	10	30	22	40	6	47	18	52
12	Th.	11	12	23	24	7	33	19	35
13	F.			12	01	8	22	20	21
14	Sa.	0	15	12	58	9	18	21	13
15	S.	1	16	14	14	10	21	22	18
16	M.	2	30	15	46	11	33	23	39
17	Tu.	4	02	17	07			12	44
18	W.	5	21	18	10	0	55	13	48
19	Th.	6	22	18	59	2	00	14	41
20	F.	7	13	19	41	2	57	15	29
21	Sa.	7	56	20	20	3	49	16	11
22	S.	8	38	20	58	4	37	16	50
23	M.	9	19	21	35	5	20	17	27
24	Tu.	10	00	22	11	6	01	18	02
25	W.	10	42	22	46	6	41	18	36
26	Th.	11	26	23	22	7	20	19	10
27	F.			12	13	7	59	19	45
28	Sa.	0	01	13	03	8	40	20	26
29	S.	0	49	13	59	9	25	21	17
30	M.	1	48	15	03	10	17	22	17
31	Tu.	2	58	16	13	11	14	23	23

## NOVEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	W.	4	18	17	15			12	14
2	Th.	5	27	18	06	0	30	13	12
3	F.	6	22	18	48	1	32	14	05
4	Sa.	7	05	19	22	2	29	14	54
5	S.	7	43	19	54	3	20	15	39
6	M.	8	20	20	27	4	08	16	21
7	Tu.	8	57	21	03	4	54	17	02
8	W.	9	35	21	43	5	40	17	44
9	Th.	10	16	22	26	6	27	18	29
10	F.	11	01	23	13	7	16	19	18
11	Sa.	11	54			8	09	20	11
12	S.	0	04	12	56	9	05	21	09
13	M.	1	06	14	09	10	04	22	14
14	Tu.	2	26	15	33	11	06	23	23
15	W.	3	52	16	45			12	11
16	Th.	5	02	17	46	0	33	13	14
17	F.	6	03	18	37	1	41	14	10
18	Sa.	6	56	19	20	2	40	15	00
19	S.	7	42	19	58	3	29	15	44
20	M.	8	24	20	35	4	14	16	21
21	Tu.	9	03	21	11	4	56	16	56
22	W.	9	41	21	46	5	36	17	31
23	Th.	10	19	22	21	6	15	18	07
24	F.	10	58	22	57	6	53	18	45
25	Sa.	11	38	23	35	7	32	19	25
26	S.	.....		12	20	8	12	20	08
27	M.	0	16	13	06	8	54	20	55
28	Tu.	1	06	14	00	9	39	21	46
29	W.	2	09	15	09	10	28	22	43
30	Th.	3	21	16	17	11	23	23	47

The Time used is Eastern Standard, for the 75th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

At Cap à la Roche, the lowest tides are not at the springs. The lowest low waters usually occur a few days after the Moon's quarters. See explanations and table on page 7.

## TIDE TABLES.—BEAUJEU CHANNEL.—1911.

## APRIL.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	Sa.	5	55	18	25	0	22	12	53	
2	S.	6	33	19	07	1	02	13	40	
3	M.	7	16	19	54	1	43	14	30	
4	Tu.	8	05	20	48	2	27	15	24	
5	W.	8	59	21	54	3	17	16	23	
6	Th.	10	06	23	16	4	17	17	29	D
7	F.	11	30	.....	.....	5	28	18	41	
8	Sa.	0	43	12	56	6	44	19	50	
9	S.	1	54	14	04	7	56	20	49	
10	M.	2	52	15	02	9	01	21	40	
11	Tu.	3	37	15	51	9	57	22	24	
12	W.	4	16	16	32	10	45	23	03	
13	Th.	4	50	17	11	11	26	23	39	O
14	F.	5	23	17	49	.....	.....	12	05	
15	Sa.	5	55	18	26	0	13	12	43	
16	S.	6	28	19	03	0	46	13	20	
17	M.	7	02	19	41	1	18	13	58	
18	Tu.	7	39	20	21	1	51	14	37	
19	W.	8	19	21	09	2	28	15	19	
20	Th.	9	06	22	12	3	11	16	07	
21	F.	10	04	23	30	4	03	17	03	C
22	Sa.	11	23	.....	.....	5	05	18	05	
23	S.	0	44	12	47	6	14	19	08	
24	M.	1	45	13	54	7	22	20	10	
25	Tu.	2	33	14	41	8	23	21	03	
26	W.	3	13	15	24	9	19	21	50	
27	Th	3	48	16	05	10	11	22	34	
28	F.	4	22	16	44	11	01	23	16	☉
29	Sa.	4	56	17	23	11	50	23	57	
30	S.	5	32	18	03	.....	.....	12	38	

## MAY.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	M.	6	10	18	46	0	39	13	26	
2	Tu.	6	52	19	35	1	23	14	15	
3	W.	7	42	20	33	2	12	15	06	
4	Th.	8	43	21	42	3	07	16	03	
5	F.	9	55	23	05	4	09	17	05	D
6	Sa.	11	17			5	16	18	13	
7	S.	0	26	12	38	6	27	19	21	
8	M.	1	31	13	47	7	36	20	20	
9	Tu.	2	23	14	42	8	37	21	09	
10	W.	3	08	15	27	9	32	21	52	
11	Th.	3	48	16	09	10	20	22	31	
12	F.	4	25	16	50	11	03	23	07	
13	Sa.	4	59	17	29	11	44	23	43	O
14	S.	5	31	18	06			12	23	
15	M.	6	03	18	41	0	18	13	00	
16	Tu.	6	36	19	16	0	53	13	36	
17	W.	7	10	19	52	1	29	14	13	
18	Th.	7	47	20	31	2	07	14	52	
19	F.	8	29	21	20	2	48	15	35	
20	Sa.	9	24	22	28	3	35	16	26	
21	S.	10	35	23	43	4	32	17	23	C
22	M.	11	56			5	37	18	22	
23	Tu.	0	50	13	06	6	45	19	21	
24	W.	1	39	14	03	7	51	20	18	
25	Th.	2	25	14	52	8	51	21	12	
26	F.	3	07	15	37	9	47	22	02	
27	Sa.	3	47	16	21	10	40	22	48	
28	S.	4	28	17	05	11	32	23	33	☉
29	M.	5	10	17	50			12	23	
30	Tu.	5	54	18	37	0	19	13	13	
31	W.	6	42	19	28	1	07	14	03	

## JUNE.

		H.	M.	H.	M.	H.	M.	H.	M.	
1	Th.	7	35	20	28	1	57	14	54	
2	F.	8	34	21	34	2	50	15	46	
3	Sa.	9	43	22	44	3	47	16	39	D
4	S.	10	55	23	55	4	49	17	35	
5	M.	.....		12	11	5	56	18	34	
6	Tu.	1	00	13	22	7	04	19	31	
7	W.	1	55	14	21	8	07	20	21	
8	Th.	2	40	15	10	9	04	21	07	
9	F.	3	19	15	51	9	54	21	50	
10	Sa.	3	56	16	29	10	40	22	31	
11	S.	4	32	17	06	11	23	23	11	O
12	M.	5	07	17	42	12	04	23	50	
13	Tu.	5	41	18	18	.....		12	42	
14	W.	6	16	18	55	0	29	13	18	
15	Th.	6	51	19	31	1	09	13	54	
16	F.	7	27	20	08	1	50	14	32	
17	Sa.	8	06	20	47	2	32	15	13	
18	S.	8	53	21	36	3	17	15	58	
19	M.	9	54	22	35	4	08	16	48	C
20	Tu.	11	05	23	41	5	07	17	42	
21	W.	.....		12	18	6	14	18	37	
22	Th.	0	46	13	21	7	22	19	33	
23	F.	1	41	14	18	8	26	20	29	
24	Sa.	2	31	15	09	9	26	21	25	
25	S.	3	20	15	59	10	24	22	21	
26	M.	4	08	16	50	11	19	23	15	☉
27	Tu.	4	56	17	40	.....		12	10	
28	W.	5	44	18	29	0	07	12	59	
29	Th.	6	33	19	19	0	57	13	47	
30	F.	7	24	20	11	1	46	14	34	

## JULY.

		H.	M.	H.	M.	H.	M.	H.	M.	
1	Sa.	8	21	21	06	2	36	15	21	
2	S.	9	23	22	05	3	27	16	09	
3	M.	10	30	23	10	4	20	16	58	D
4	Tu.	11	41	.....	.....	5	17	17	48	
5	W.	0	14	12	50	6	19	18	40	
6	Th.	1	14	13	48	7	28	19	33	
7	F.	2	06	14	39	8	33	20	27	
8	Sa.	2	52	15	27	9	31	21	19	
9	S.	3	35	16	11	10	20	22	06	
10	M.	4	15	16	51	11	03	22	49	
11	Tu.	4	52	17	29	11	43	23	31	O
12	W.	5	26	18	05	.....	.....	12	21	
13	Th.	5	59	18	37	0	11	12	57	
14	F.	6	31	19	07	0	50	13	32	
15	Sa.	7	04	19	36	1	30	14	07	
16	S.	7	41	20	09	2	11	14	44	
17	M.	8	24	20	54	2	56	15	24	
18	Tu.	9	17	21	48	3	45	16	08	
19	W.	10	21	22	49	4	40	16	58	C
20	Th.	11	32	23	59	5	42	17	56	
21	F.	.....	.....	12	46	6	51	18	57	
22	Sa.	1	08	13	56	8	04	20	09	
23	S.	2	09	14	57	9	12	21	13	
24	M.	3	05	15	51	10	14	22	11	
25	Tu.	3	59	16	41	11	09	23	05	☉
26	W.	4	50	17	28	11	56	23	55	
27	Th.	5	39	18	14	.....	.....	12	40	
28	F.	6	26	18	59	0	43	13	22	
29	Sa.	7	13	19	45	1	30	14	03	
30	S.	8	01	20	34	2	16	14	44	
31	M.	8	55	21	29	3	03	15	26	

The Time used is Eastern Standard, for the 75th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The rise of the tide is practically the same as at Quebec; being if anything slightly greater, both at the springs and the neaps.



## AUGUST.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	Tu.	H. M.	H. M.	H. M.	H. M.	
2	W.	9 56	22 28	3 52	16 09	
3	Th.	11 00	23 29	4 45	16 54	
4	F.	.....	12 06	5 43	17 45	
5	Sa.	0 30	13 11	6 46	18 42	
6	S.	1 29	14 12	7 55	19 47	
7	M.	2 24	15 06	9 00	20 46	
8	Tu.	3 13	15 54	9 53	21 39	
9	W.	3 55	16 36	10 36	22 26	
10	Th.	4 34	17 13	11 15	23 10	
11	F.	5 09	17 44	11 52	23 51	
12	Sa.	5 42	18 11	.....	12 28	
13	S.	6 13	18 37	0 31	13 03	
14	M.	6 46	19 06	1 11	13 39	
15	Tu.	7 23	19 39	1 52	14 16	
16	W.	8 05	20 18	2 35	14 55	
17	Th.	8 53	21 03	3 22	15 37	
18	F.	9 50	22 10	4 16	16 25	
19	Sa.	10 59	23 22	5 20	17 24	
20	S.	.....	12 24	6 33	18 33	
21	M.	0 42	13 43	7 52	19 47	
22	Tu.	1 56	14 48	9 02	20 58	
23	W.	2 57	15 43	10 01	21 59	
24	Th.	3 50	16 30	10 51	22 52	
25	F.	4 37	17 14	11 36	23 40	
26	Sa.	5 23	17 56	.....	12 18	
27	S.	6 09	18 36	0 25	12 58	
28	M.	6 56	19 17	1 08	13 36	
29	Tu.	7 43	20 00	1 51	14 13	
30	W.	8 31	20 46	2 35	14 49	
31	Th.	9 21	21 36	3 21	15 26	
		10 16	22 33	4 10	16 07	

## SEPTEMBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.				
		Morn'g.		After'n.						
		H.	M.	H.	M.		H.	M.	H.	M.
1	F.	11	20	23	38	5	03	16	57	
2	Sa.	.....	.....	12	31	6	04	17	57	
3	S.	0	50	13	40	7	13	19	05	
4	M.	1	55	14	40	8	22	20	14	
5	Tu.	2	50	15	30	9	20	21	14	
6	W.	3	36	16	11	10	07	22	04	
7	Th.	4	13	16	44	10	46	22	47	
8	F.	4	47	17	12	11	21	23	27	○
9	Sa.	5	19	17	39	11	55	.....	.....	
10	S.	5	52	18	07	0	07	12	30	
11	M.	6	26	18	38	0	48	13	06	
12	Tu.	7	02	19	13	1	30	13	43	
13	W.	7	42	19	54	2	14	14	22	
14	Th.	8	31	20	44	3	03	15	06	
15	F.	9	30	21	43	4	01	15	58	☾
16	Sa.	10	41	22	55	5	10	17	01	
17	S.	.....	.....	12	07	6	22	18	19	
18	M.	0	22	13	27	7	36	19	38	
19	Tu.	1	43	14	36	8	45	20	49	
20	W.	2	46	15	31	9	42	21	48	
21	Th.	3	40	16	17	10	31	22	39	
22	F.	4	28	16	59	11	13	23	25	☉
23	Sa.	5	13	17	37	11	51	.....	.....	
24	S.	5	56	18	14	0	08	12	26	
25	M.	6	37	18	51	0	50	13	00	
26	Tu.	7	17	19	28	1	31	13	34	
27	W.	7	53	20	06	2	11	14	09	
28	Th.	8	41	20	46	2	52	14	46	
29	F.	9	30	21	34	3	34	15	27	
30	Sa.	10	38	22	40	4	22	16	17	☾

## OCTOBER.

		H.	M.	H.	M.	H.	M.
1	S.			12	00	5	21
2	M.	0	04	13	09	6	27
3	Tu.	1	16	14	08	7	32
4	W.	2	15	14	57	8	31
5	Th.	3	04	15	37	9	22
6	F.	3	44	16	09	10	05
7	Sa.	4	21	16	39	10	45
8	S.	4	56	17	08	11	24
9	M.	5	30	17	38		
10	Tu.	6	04	18	12	0	32
11	W.	6	40	18	50	1	17
12	Th.	7	22	19	34	2	03
13	F.	8	11	20	25	2	52
14	Sa.	9	08	21	26	3	48
15	S.	10	24	22	40	4	51
16	M.	11	56			6	03
17	Tu.	0	12	13	17	7	14
18	W.	1	31	14	20	8	18
19	Th.	2	32	15	09	9	11
20	F.	3	23	15	51	9	59
21	Sa.	4	06	16	30	10	41
22	S.	4	48	17	08	11	20
23	M.	5	29	17	45	11	57
24	Tu.	6	10	18	21	0	31
25	W.	6	52	18	56	1	11
26	Th.	7	36	19	32	1	50
27	F.	8	23	20	11	2	29
28	Sa.	9	13	20	59	3	10
29	S.	10	09	21	58	3	55
30	M.	11	13	23	08	4	47
31	Tu.			12	23	5	44

## NOVEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	W.	0	26	13	23	6	44	19	00
2	Th.	1	35	14	14	7	42	20	02
3	F.	2	30	14	56	8	35	20	59
4	Sa.	3	13	15	30	9	24	21	50
5	S.	3	51	16	02	10	09	22	38
6	M.	4	28	16	35	10	51	23	24
7	Tu.	5	05	17	11	11	32	.....	.....
8	W.	5	43	17	51	0	10	12	14
9	Th.	6	24	18	34	0	57	12	59
10	F.	7	09	19	21	1	46	13	48
11	Sa.	8	02	20	12	2	39	14	31
12	S.	9	04	21	14	3	35	15	49
13	M.	10	17	22	34	4	34	16	44
14	Tu.	11	41	.....	.....	5	36	17	53
15	W.	0	00	12	53	6	41	19	03
16	Th.	1	10	13	54	7	44	20	11
17	F.	2	11	14	45	8	40	21	10
18	Sa.	3	04	15	28	9	30	21	59
19	S.	3	50	16	06	10	14	22	44
20	M.	4	32	16	43	10	51	23	26
21	Tu.	5	11	17	19	11	26	.....	.....
22	W.	5	49	17	54	0	06	12	01
23	Th.	6	27	18	29	0	45	12	37
24	F.	7	06	19	05	1	23	13	15
25	Sa.	7	46	19	43	2	02	13	55
26	S.	8	28	20	24	2	42	14	38
27	M.	9	14	21	14	3	24	15	25
28	Tu.	10	08	22	17	4	09	16	16
29	W.	11	17	23	29	4	58	17	13
30	Th.	.....	.....	12	25	5	53	18	17

The TIME used is Eastern Standard, for the 75th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The rise of the tide is practically the same as at Quebec; being if anything slightly greater, both at the springs and the neaps.

APRIL.											MAY.										
Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.	Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.			
1	Sa.	6	42	19	10	0	55	13	20		1	M.	6	55	19	36	1	07	13	52	
2	S.	7	20	19	53	1	29	14	03		2	Tu.	7	41	20	25	1	47	14	41	
3	M.	8	03	20	40	2	07	14	52		3	W.	8	33	21	19	2	30	15	36	
4	Tu.	8	52	21	32	2	50	15	48		4	Th.	9	31	22	24	3	17	16	43	
5	W.	9	48	22	33	3	39	16	53		5	F.	10	36	23	37	4	15	17	57	D
6	Th.	10	54	23	52	4	36	18	13	D	6	Sa.	11	51	.....	.....	5	38	19	16	
7	F.	.....	.....	12	11	5	50	19	42		7	S.	1	00	13	10	7	14	20	27	
8	Sa.	1	24	13	34	7	40	20	59		8	M.	2	07	14	24	8	34	21	21	
9	S.	2	43	14	48	8	50	21	57		9	Tu.	3	02	15	25	9	37	22	02	
10	M.	3	41	15	50	9	53	22	41		10	W.	3	46	16	13	10	27	22	37	
11	Tu.	4	23	16	39	10	46	23	16		11	Th.	4	25	16	54	11	07	23	09	
12	W.	4	58	17	17	11	30	23	47		12	F.	5	01	17	31	11	44	23	39	
13	Th.	5	32	17	52	.....	.....	12	09	O	13	Sa.	5	35	18	05	.....	.....	12	20	O
14	F.	6	05	18	26	0	17	12	46		14	S.	6	08	18	38	0	08	12	53	
15	Sa.	6	38	19	00	0	46	13	21		15	M.	6	41	19	12	0	38	13	30	
16	S.	7	12	19	34	1	14	13	56		16	Tu.	7	15	19	47	1	10	14	06	
17	M.	7	47	20	09	1	42	14	32		17	W.	7	51	20	25	1	44	14	45	
18	Tu.	8	24	20	47	2	11	15	10		18	Th.	8	31	21	13	2	22	15	30	
19	W.	9	03	21	32	2	42	15	55		19	F.	9	16	22	10	3	06	16	21	
20	Th.	9	46	22	31	3	22	16	52		20	Sa.	10	08	23	13	3	58	17	20	
21	F.	10	40	23	45	4	15	18	02	C	21	S.	11	11	.....	.....	5	02	18	24	C
22	Sa.	11	54	.....	.....	5	29	19	29		22	M.	0	16	12	22	6	23	19	28	
23	S.	1	05	13	11	6	58	20	36		23	Tu.	1	18	13	27	7	42	20	23	
24	M.	2	14	14	15	8	21	21	23		24	W.	2	12	14	26	8	49	21	10	
25	Tu.	3	04	15	09	9	24	22	03		25	Th.	2	59	15	21	9	43	21	54	
26	W.	3	45	15	58	10	12	22	41		26	F.	3	44	16	12	10	33	22	36	
27	Th.	4	23	16	44	10	57	23	18		27	Sa.	4	28	17	01	11	21	23	17	
28	F.	5	00	17	27	11	41	23	54	⊕	28	S.	5	12	17	49	12	08	23	58	⊕
29	Sa.	5	36	18	09	.....	.....	12	24		29	M.	5	57	18	37	.....	.....	12	55	
30	S.	6	14	18	51	0	30	13	07		30	Tu.	6	43	19	26	0	40	13	43	
											31	W.	7	31	20	16	1	25	14	33	

JUNE.											JULY.										
Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.	Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.			
1	Th.	8	22	21	09	2	15	15	26		1	Sa.	9	06	21	44	3	03	15	56	
2	F.	9	18	22	08	3	11	16	23		2	S.	9	58	22	39	3	57	16	46	
3	Sa.	10	19	23	13	4	13	17	27	D	3	M.	10	53	23	38	4	55	17	38	D
4	S.	11	26	.....	.....	5	25	18	32		4	Tu.	11	54	.....	.....	6	06	18	32	
5	M.	0	21	12	39	6	45	19	33		5	W.	0	38	13	01	7	25	19	27	
6	Tu.	1	27	13	47	8	04	20	27		6	Th.	1	37	14	07	8	37	20	21	
7	W.	2	25	14	48	9	10	21	13		7	F.	2	32	15	07	9	36	21	13	
8	Th.	3	12	15	39	10	04	21	53		8	Sa.	3	22	16	00	10	27	22	01	
9	F.	3	52	16	23	10	48	22	31		9	S.	4	06	16	45	11	11	22	44	
10	Sa.	4	30	17	03	11	27	23	08		10	M.	4	47	17	25	11	50	23	24	
11	S.	5	07	17	40	12	04	23	44	O	11	Tu.	5	25	18	02	.....	.....	12	26	O
12	M.	5	43	18	16	.....	.....	12	40		12	W.	6	01	18	38	0	01	13	01	
13	Tu.	6	20	18	52	0	19	13	16		13	Th.	6	38	19	13	0	37	13	35	
14	W.	6	58	19	29	0	54	13	53		14	F.	7	15	19	43	1	13	14	10	
15	Th.	7	36	20	08	1	30	14	31		15	Sa.	7	53	20	25	1	51	14	46	
16	F.	8	15	20	50	2	08	15	11		16	S.	8	32	21	07	2	32	15	24	
17	Sa.	8	57	21	37	2	50	15	54		17	M.	9	14	21	54	3	19	16	04	
18	S.	9	45	22	31	3	40	16	41		18	Tu.	10	03	22	46	4	13	16	46	
19	M.	10	41	23	27	4	40	17	33	C	19	W.	11	02	23	43	5	14	17	33	C
20	Tu.	11	42	.....	.....	5	49	18	30		20	Th.	.....	.....	12	07	6	23	18	30	
21	W.	0	25	12	46	7	01	19	28		21	F.	0	45	13	14	7	37	19	35	
22	Th.	1	25	13	51	8	11	20	23		22	Sa.	1	48	14	22	8	55	20	43	
23	F.	2	23	14	51	9	13	21	14		23	S.	2	49	15	30	10	05	21	46	
24	Sa.	3	16	15	47	10	10	22	04		24	M.	3	49	16	33	11	03	22	45	
25	S.	4	05	16	40	11	04	22	53		25	Tu.	4	46	17	27	11	53	23	35	⊕
26	M.	4	54	17	31	11	55	23	41	⊕	26	W.	5	39	18	14	.....	.....	12	39	
27	Tu.	5	44	18	21	.....	.....	12	45		27	Th.	6	28	19	00	0	24	13	23	
28	W.	6	35	19	10	0	30	13	34		28	F.	7	14	19	45	1	12	14	05	
29	Th.	7	25	20	00	1	20	14	22		29	S.	7	59	20	29	2	00	14	45	
30	F.	8	15	20	51	2	11	15	09		30	S.	8	44	21	14	2	49	15	25	
											31	M.	9	30	22	00	3	38	16	06	

The TIME used is Eastern Standard, for the 75th Meridian, as in the other St. Lawrence tables.

UPPER TRAVERSE.—To find the turn of the current in the Upper Traverse, *subtract* 22 minutes at High Water and *subtract* 5 minutes at Low Water from the time given in the above tables.

EFFECT OF THE MOON'S DECLINATION.—When the Moon is in high declination, north or south of the equator, a few days occur when the turn of the current at Low Water may be 15 minutes earlier or later than given in the tables. At High Water, the variation is scarcely appreciable.



AUGUST.										SEPTEMBER.												
Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.		Date.	Day.	H. W. SLACK. (Ebb begins.)				L. W. SLACK. (Flood begins.)				Moon.
		H.	M.	H.	M.	H.	M.	H.	M.					H.	M.	H.	M.	H.	M.			
1	Tu.	10	18	22	50	4	29	16	49	D		1	F.	11	21	23	57	5	47	17	27	
2	W.	11	09	23	48	5	27	17	35			2	Sa.			12	35	7	23	18	37	
3	Th.			12	07	6	37	18	27			3	S.	1	09	14	07	8	57	20	01	
4	F.	0	49	13	19	7	58	19	31			4	M.	2	25	15	25	10	01	21	17	
5	Sa.	1	51	14	35	9	17	20	35			5	Tu.	3	26	16	13	10	42	22	11	
6	S.	2	51	15	39	10	19	21	35			6	W.	4	14	16	49	11	15	22	54	
7	M.	3	45	16	31	11	03	22	28			7	Th.	4	53	17	21	11	43	23	32	
8	Tu.	4	33	17	14	11	41	23	13			8	F.	5	29	17	52			12	10	
9	W.	5	14	17	48	12	14	23	53	O		9	Sa.	6	04	18	22	0	08	12	39	
10	Th.	5	51	18	19			12	45			10	S.	6	38	18	53	0	44	13	09	
11	F.	6	24	18	49	0	29	13	15			11	M.	7	12	19	27	2	01	14	15	
12	Sa.	6	56	19	21	1	04	13	45			12	Tu.	7	47	20	06	2	40	14	53	
13	S.	7	29	19	56	2	18	14	49			13	W.	8	26	20	51	3	30	15	34	
14	M.	8	05	20	35	3	00	15	24			14	Th.	9	14	21	43	4	28	16	23	
15	Tu.	8	48	21	19	3	50	16	05			15	F.	10	12	22	45	5	40	17	23	
16	W.	9	37	22	08	4	49	16	54			16	Sa.	11	21	23	56	7	11	18	55	
17	Th.	10	34	23	04	5	58	17	52			17	S.			12	40	8	40	20	25	
18	F.	11	39			7	19	19	03			18	M.	1	13	14	05	9	47	21	34	
19	Sa.	0	09	12	52	8	41	20	25			19	Tu.	2	29	15	20	10	41	22	31	
20	S.	1	21	14	12	9	54	21	41			20	W.	3	34	16	16	11	23	23	19	
21	M.	2	39	15	27	10	54	22	43			21	Th.	4	29	16	58	11	59			
22	Tu.	3	45	16	28	11	43	23	36			22	F.	5	16	17	37	0	04	12	32	
23	W.	4	39	17	15			23	36			23	Sa.	5	59	18	15	0	46	13	04	
24	Th.	5	27	17	58			12	23			24	S.	6	39	18	52	1	27	13	36	
25	F.	6	11	18	38	0	23	13	00			25	M.	7	17	19	28	2	08	14	08	
26	Sa.	6	53	19	17	1	06	13	35			26	Tu.	7	54	20	05	2	49	14	41	
27	S.	7	34	19	55	2	26	14	43			27	W.	8	31	20	43	3	31	15	15	
28	M.	8	14	20	34	3	07	15	18			28	Th.	9	09	21	23	4	15	15	51	
29	Tu.	8	55	21	16	3	52	15	54			29	F.	9	50	22	09	5	11	16	35	
30	W.	9	38	22	02	4	43	16	35			30	Sa.	10	43	23	06					
31	Th.	10	25	22	54																	

## OCTOBER.

## NOVEMBER.

OCTOBER.

		H.	M.	H.	M.	H.	M.	H.	M.							H.	M.	H.	M.	H.	M.					
1	S.	11	57	13	32	6	33	17	47	1	W.	0	54	13	54	8	13	20	05							
2	M.	0	19	13	32	8	07	19	19	2	Th.	2	00	14	45	9	02	21	08							
3	Tu.	1	42	14	51	9	18	20	47	3	F.	2	53	15	24	9	38	21	56							
4	W.	2	49	15	38	10	01	21	45	4	Sa.	3	38	16	01	10	13	22	40							
5	Th.	3	40	16	14	10	35	22	28	5	S.	4	21	16	37	11	48	23	21							
6	F.	4	19	16	45	11	06	23	08	6	M.	5	03	17	13	0	02	12	02							
7	Sa.	4	56	17	15	11	36	23	47	7	Tu.	5	44	17	52	1	29	13	22							
8	S.	5	32	17	46			12	06	8	W.	6	26	18	36	0	44	12	41							
9	M.	6	08	18	19	0	25	12	37	9	Th.	7	10	19	23	1	18	14	07							
10	Tu.	6	45	18	56	1	03	13	09	10	F.	7	58	20	14	2	18	14	07							
11	W.	7	24	19	37	1	44	13	44	11	Sa.	8	51	21	09	3	11	14	58							
12	Th.	8	09	20	25	2	29	14	24	12	S.	9	53	22	11	4	09	15	57							
13	F.	9	00	21	18	3	19	15	09	13	M.	11	03	23	21	5	17	17	09							
14	Sa.	9	59	22	18	4	16	16	01	14	Tu.			12	15	6	33	18	33							
15	S.	11	07	23	20	5	25	17	13	15	W.	0	37	13	25	7	47	19	57							
16	M.			12	30	6	56	18	39	16	Th.	1	46	14	26	8	45	21	07							
17	Tu.	0	54	13	52	8	22	20	10	17	F.	2	49	15	17	9	32	22	03							
18	W.	2	09	14	57	9	25	21	22	18	Sa.	3	44	15	59	10	11	22	48							
19	Th.	3	13	15	49	10	13	22	21	19	S.	4	30	16	39	11	22									
20	F.	4	08	16	31	10	53	23	06	20	M.	5	10	17	18	0	08	11	56							
21	Sa.	4	54	17	08	11	26	23	48	21	Tu.	5	47	17	56	0	46	12	39							
22	S.	5	33	17	43	11	57			22	W.	6	24	18	32	0	08	13	05							
23	M.	6	09	18	17	0	27	12	28	23	Th.	7	02	19	08	1	23	13	41							
24	Tu.	6	44	18	52	1	05	12	57	24	F.	7	42	19	45	2	38	14	20							
25	W.	7	19	19	28	2	12	13	00	25	Sa.	8	23	20	24	3	19	15	02							
26	Th.	7	55	20	06	2	49	14	34	26	S.	9	07	21	06	4	05	15	50							
27	F.	8	35	20	47	3	41	15	14	27	M.	9	56	21	54	4	57	16	49							
28	Sa.	9	21	21	35	4	33	16	06	28	Tu.	10	52	22	53	5	57	17	59							
29	S.	10	16	22	31	5	43	17	17	29	W.	11	55			6	58	19	13							
30	M.	11	27	23	38	7	01	18	43	30	Th.	0	02	12	56											
31	Tu.			12	45																					

The TIME used is Eastern Standard, for the 75th Meridian, as in the other St. Lawrence tables.  
 UPPER TRAVERSE.—To find the turn of the current in the Upper Traverse, subtract 22 minutes at High Water and subtract 5 minutes at Low Water from the time given in the above tables.  
 Effect of the MOON'S DECLINATION.—When the Moon is in high declination, north or south of the equator, a few days occur when the turn of the current at Low Water may be 15 minutes earlier or later than given in the tables. At High Water, this variation is scarcely appreciable.

Date.	Day.	JANUARY.								Date.	Day.	FEBRUARY.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.			
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.				
1	♂.	8:25	6'0	21:08	5'5	2:08	2'4	14:38	1'2	1	W.	9:16	6'1	21:49	5'7	3:13	1'8	15:43	0'8
2	M.	9:03	6'0	21:41	5'5	2:44	2'4	15:17	1'2	2	Th.	9:51	6'0	22:24	5'9	3:56	1'7	16:21	1'0
3	Tu.	9:39	5'9	22:14	5'6	3:22	2'3	16:01	1'2	3	F.	10:30	5'9	23:02	6'0	4:41	1'6	17:00	1'1
4	W.	10:15	5'9	22:50	5'6	4:06	2'3	16:47	1'2	4	Sa.	11:16	5'8	23:45	6'0	5:32	1'6	17:41	1'3
5	Th.	10:54	5'8	23:31	5'7	4:55	2'3	17:34	1'3	5	♂.	.....	12:09	5'6	6:28	1'7	18:32	1'6	
6	F.	11:38	5'7	.....	.....	5:50	2'2	18:22	1'5	6	M.	0:34	6'0	13:07	5'4	7:33	1'7	19:36	1'9
7	Sa.	0:16	5'8	12:28	5'6	6:50	2'1	19:12	1'6	7	Tu.	1:32	6'0	14:12	5'2	8:44	1'6	20:52	2'0
8	♂.	1:07	5'9	13:28	5'5	8:00	2'0	20:07	1'7	8	W.	2:36	5'9	15:26	5'2	9:50	1'4	22:05	2'1
9	M.	2:03	6'0	14:34	5'4	9:08	1'7	21:10	1'8	9	Th.	3:45	5'9	16:38	5'2	10:51	1'1	23:09	2'0
10	Tu.	3:04	6'1	15:44	5'4	10:10	1'4	22:14	1'8	10	F.	4:51	6'0	17:45	5'5	11:49	0'8	.....	.....
11	W.	4:07	6'3	16:53	5'5	11:08	1'1	23:13	1'8	11	Sa.	5:54	6'1	18:44	5'8	0:10	1'8	12:45	0'6
12	Th.	5:09	6'4	17:56	5'7	.....	.....	12:04	0'8	12	♂.	6:52	6'2	19:33	6'0	1:07	1'5	13:37	0'3
13	F.	6:08	6'6	18:54	5'9	0:11	1'7	12:58	0'5	13	M.	7:44	6'3	20:20	6'1	2:00	1'3	14:25	0'2
14	Sa.	7:04	6'7	19:48	6'1	1:08	1'6	13:51	0'3	14	Tu.	8:32	6'4	21:04	6'2	2:49	1'1	15:08	0'3
15	♂.	7:57	6'7	20:38	6'2	2:05	1'5	14:43	0'1	15	W.	9:16	6'3	21:46	6'2	3:36	1'1	15:50	0'5
16	M.	8:48	6'6	21:26	6'3	3:01	1'5	15:34	0'2	16	Th.	9:58	6'1	22:27	6'1	4:22	1'2	16:32	0'8
17	Tu.	9:37	6'5	22:13	6'2	3:56	1'5	16:24	0'4	17	F.	10:41	5'9	23:08	6'0	5:07	1'4	17:14	1'3
18	W.	10:24	6'2	23:00	6'1	4:50	1'5	17:13	0'7	18	Sa.	11:26	5'6	23:51	5'7	5:52	1'6	17:57	1'7
19	Th.	11:12	5'9	23:48	6'0	5:42	1'6	18:01	1'1	19	♂.	.....	12:13	5'3	6:38	1'8	18:44	2'1	
20	F.	.....	.....	12:02	5'6	6:33	1'8	18:50	1'5	20	M.	0:38	5'5	13:03	5'1	7:27	2'0	19:36	2'5
21	Sa.	0:37	5'8	12:55	5'3	7:25	2'0	19:40	1'9	21	Tu.	1:28	5'4	14:02	4'8	8:20	2'2	20:33	2'7
22	♂.	1:27	5'6	13:52	5'1	8:19	2'1	20:32	2'3	22	W.	2:22	5'2	15:08	4'7	9:16	2'1	21:34	2'8
23	M.	2:18	5'5	14:53	5'0	9:14	2'1	21:25	2'5	23	Th.	3:22	5'1	16:18	4'6	10:12	2'0	22:34	2'8
24	Tu.	3:12	5'4	15:55	4'9	10:08	2'1	22:17	2'6	24	F.	4:23	5'1	17:18	4'8	11:07	1'8	23:27	2'6
25	W.	4:07	5'4	16:54	5'0	11:00	2'0	23:08	2'7	25	S.	5:20	5'3	18:11	5'0	11:55	1'5	.....	.....
26	Th.	5:02	5'5	17:49	5'0	11:49	1'8	23:57	2'6	26	♂.	6:13	5'5	18:57	5'2	0:13	2'3	12:38	1'2
27	F.	5:54	5'6	18:38	5'1	.....	.....	12:32	1'6	27	M.	7:00	5'7	19:36	5'4	0:56	1'9	13:17	0'9
28	Sa.	6:41	5'7	19:21	5'2	0:39	2'4	13:12	1'3	28	Tu.	7:41	5'9	20:11	5'7	1:37	1'6	13:57	0'7
29	♂.	7:26	5'8	20:02	5'4	1:18	2'2	13:51	1'1										
30	M.	8:05	5'9	20:40	5'5	1:55	2'1	14:29	1'0										
31	Tu.	8:41	6'0	21:15	5'6	2:33	2'0	15:06	0'8										

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

THE DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23'4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax, are given on page 10.

Date.	Day.	MARCH.								Date.	Day.	APRIL.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.			
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.		
1	W.	8:18	6.0	20:45	5.9	2:17	1.3	14:36	0.6	1	Sa.	9:17	6.2	21:33	6.5	3:12	0.4	15:28	0.8
2	Th.	8:55	6.1	21:20	6.1	2:58	1.1	15:15	0.6	2	§	10:01	6.1	22:16	6.4	3:57	0.5	16:14	1.1
3	F.	9:34	6.2	21:58	6.2	3:40	1.0	15:56	0.7	3	M.	10:47	5.9	23:02	6.2	4:53	0.7	17:10	1.5
4	Sa.	10:14	6.1	22:38	6.2	4:24	1.0	16:39	1.0	4	Tu.	11:42	5.6	23:56	5.9	6:00	0.9	18:16	1.9
5	§.	11:00	5.9	23:23	6.1	5:12	1.1	17:25	1.3	5	W.	.....	12:43	5.3	7:10	1.1	19:30	2.2	
6	M.	11:54	5.6	.....	.....	6:08	1.2	18:19	1.7	6	Th.	0:57	5.5	13:51	5.1	8:18	1.2	20:50	2.2
7	Tu.	0:14	5.9	12:53	5.3	7:18	1.4	19:30	2.0	7	F.	2:06	5.2	15:03	4.9	9:22	1.2	22:01	2.0
8	W.	1:12	5.7	13:56	5.1	8:28	1.4	20:48	2.2	8	Sa.	3:24	5.1	16:16	5.1	10:23	1.1	23:02	1.7
9	Th.	2:15	5.6	15:11	5.0	9:35	1.3	22:02	2.2	9	§	4:37	5.1	17:19	5.4	11:21	1.0	23:55	1.4
10	F.	3:30	5.4	16:30	5.0	10:37	1.1	23:06	1.9	10	M.	5:38	5.3	18:13	5.7	.....	.....	12:12	0.9
11	Sa.	4:42	5.4	17:41	5.2	11:36	0.9	.....	.....	11	Tu.	6:29	5.5	18:56	5.8	0:41	1.1	12:58	0.8
12	§.	5:46	5.6	18:35	5.6	0:04	1.6	12:30	0.6	12	W.	7:13	5.7	19:34	5.9	1:24	1.0	13:39	0.9
13	M.	6:43	5.8	19:18	5.8	0:57	1.3	13:20	0.5	13	Th.	7:52	5.8	20:09	6.0	2:03	0.9	14:14	1.0
14	Tu.	7:32	6.0	19:57	6.0	1:46	1.0	14:05	0.5	14	F.	8:30	5.8	20:43	6.0	2:38	0.8	14:45	1.2
15	W.	8:15	6.0	20:34	6.1	2:30	0.9	14:45	0.5	15	Sa.	9:07	5.8	21:18	6.0	3:11	0.9	15:15	1.5
16	Th.	8:54	6.1	21:10	6.1	3:09	0.9	15:21	0.8	16	§	9:45	5.7	21:54	5.9	3:44	1.0	15:46	1.8
17	F.	9:34	6.0	21:49	6.0	3:46	1.0	15:53	1.1	17	M.	10:25	5.4	22:32	5.6	4:18	1.2	16:20	2.1
18	Sa.	10:15	5.8	22:30	5.9	4:22	1.1	16:26	1.5	18	Tu.	11:08	5.2	23:13	5.3	4:55	1.5	17:01	2.4
19	§.	10:58	5.6	23:12	5.7	4:59	1.4	17:00	1.9	19	W.	11:55	4.9	23:58	5.1	5:40	1.7	17:50	2.6
20	M.	11:42	5.3	23:56	5.4	5:39	1.6	17:37	2.2	20	Th.	.....	12:46	4.7	6:37	1.8	18:56	2.8	
21	Tu.	.....	12:28	5.0	.....	6:26	1.9	18:24	2.5	21	F.	0:50	4.9	13:44	4.6	7:43	1.9	20:14	2.7
22	W.	0:43	5.1	13:19	4.7	7:24	2.0	19:32	2.8	22	Sa.	1:50	4.7	14:47	4.7	8:45	1.8	21:25	2.5
23	Th.	1:34	4.9	14:20	4.6	8:30	2.0	20:52	2.9	23	§	2:55	4.8	15:49	4.9	9:43	1.6	22:24	2.1
24	F.	2:33	4.9	15:34	4.6	9:31	2.0	21:59	2.7	24	M.	4:01	4.9	16:42	5.2	10:34	1.3	23:14	1.7
25	Sa.	3:45	4.9	16:43	4.7	10:28	1.7	22:57	2.3	25	Tu.	5:02	5.2	17:29	5.5	11:22	1.0	23:58	1.2
26	§.	4:50	5.0	17:34	5.0	11:19	1.4	23:44	1.9	26	W.	5:52	5.5	18:13	6.0	.....	.....	12:09	0.9
27	M.	5:40	5.3	18:16	5.3	.....	.....	12:04	1.0	27	Th.	6:38	5.9	18:57	6.3	0:42	0.7	12:54	0.7
28	Tu.	6:26	5.6	18:55	5.6	0:27	1.5	12:47	0.8	28	F.	7:22	6.1	19:40	6.6	1:27	0.4	13:38	0.6
29	W.	7:09	5.9	19:33	6.0	1:08	1.1	13:29	0.6	29	Sa.	8:07	6.2	20:24	6.7	2:13	0.2	14:23	0.7
30	Th.	7:52	6.1	20:12	6.3	1:49	0.8	14:09	0.5	30	§	8:55	6.3	21:09	6.7	3:00	0.1	15:10	1.0
31	F.	8:34	6.2	20:52	6.4	2:30	0.5	14:48	0.6										

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

THE DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23.4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax are given on page 10.



Date.	Day.	MAY.								Date.	Day.	JUNE.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time.	H't.	Time.	H't.	Time.	H't.	Time.	H't.			Time.	H't.	Time.	H't.	Time.	H't.		
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.
1	M.	9:46	6'0	21:57	6'5	3:50	0'1	16:03	1'3	1	Th.	11:22	5'8	23:27	5'8	5:29	0'3	18:03	1'8
2	Tu.	10:38	6'0	22:48	6'1	4:46	0'3	17:04	1'6	2	F.	.....	12:20	5'6	6:30	0'6	19:13	1'9	
3	W.	11:32	5'7	23:42	5'8	5:45	0'6	18:13	1'9	3	Sa.	0:28	5'4	13:21	5'5	7:32	0'9	20:20	1'8
4	Th.	.....	12:30	5'4	6:48	0'8	19:29	2'1	4	S.	1:35	5'1	14:23	5'4	8:32	1'1	21:19	1'7	
5	F.	0:46	5'3	13:37	5'2	7:54	1'0	20:43	2'0	5	M.	2:42	5'0	15:24	5'5	9:28	1'3	22:15	1'6
6	Sa.	1:57	5'0	14:50	5'1	8:58	1'1	21:47	1'9	6	Tu.	3:48	5'0	16:19	5'5	10:20	1'6	23:07	1'5
7	S.	3:08	4'9	15:56	5'3	9:57	1'1	22:42	1'6	7	W.	4:50	5'0	17:08	5'6	11:10	1'7	23:54	1'4
8	M.	4:16	5'0	16:55	5'5	10:53	1'2	23:32	1'4	8	Th.	5:44	5'1	17:51	5'7	11:56	1'8	.....	.....
9	Tu.	5:17	5'2	17:44	5'6	11:43	1'2	.....	.....	9	F.	6:28	5'2	18:32	5'8	0:34	1'3	12:38	2'0
10	W.	6:08	5'3	18:26	5'8	0:19	1'1	12:26	1'3	10	Sa.	7:10	5'3	19:11	5'9	1:11	1'2	13:16	2'1
11	Th.	6:52	5'4	19:03	6'0	1:02	1'0	13:05	1'5	11	S.	7:50	5'4	19:49	5'9	1:46	1'1	13:51	2'2
12	F.	7:33	5'6	19:40	6'0	1:39	1'0	13:40	1'6	12	M.	8:29	5'5	20:27	5'8	2:20	1'0	14:25	2'3
13	Sa.	8:12	5'6	20:16	6'0	2:13	1'0	14:12	1'8	13	Tu.	9:08	5'4	21:04	5'7	2:53	1'1	14:59	2'4
14	S.	8:49	5'6	20:51	5'9	2:45	1'0	14:44	2'0	14	W.	9:46	5'3	21:41	5'6	3:27	1'1	15:34	2'4
15	M.	9:25	5'5	21:26	5'8	3:17	1'1	15:17	2'2	15	Th.	10:24	5'2	22:19	5'5	4:03	1'1	16:12	2'4
16	Tu.	10:03	5'4	22:02	5'6	3:50	1'2	15:53	2'3	16	F.	11:03	5'2	22:59	5'3	4:44	1'2	16:56	2'5
17	W.	10:44	5'2	22:40	5'3	4:27	1'3	16:34	2'5	17	Sa.	11:46	5'1	23:43	5'2	5:31	1'3	17:52	2'4
18	Th.	11:29	5'1	23:22	5'1	5:11	1'5	17:20	2'8	18	S.	.....	12:32	5'2	6:23	1'4	18:58	2'3	
19	F.	.....	12:19	4'9	6:04	1'6	18:16	2'7	19	M.	0:39	5'1	13:21	5'3	7:17	1'5	20:04	2'1	
20	Sa.	0:11	4'9	13:12	4'8	7:03	1'7	19:34	2'6	20	Tu.	1:36	5'1	14:12	5'5	8:12	1'6	21:07	1'8
21	S	1:07	4'9	14:06	4'9	8:02	1'6	20:46	2'4	21	W.	2:36	5'1	15:08	5'7	9:08	1'6	22:06	1'5
22	M.	2:10	4'9	15:02	5'1	9:00	1'5	21:47	2'0	22	Th.	3:39	5'2	16:06	6'0	10:05	1'5	23:02	1'1
23	Tu.	3:15	5'0	15:56	5'5	9:56	1'4	22:39	1'5	23	F.	4:44	5'4	17:03	6'3	11:02	1'4	23:56	0'6
24	W.	4:17	5'2	16:48	5'8	10:47	1'3	23:28	1'0	24	Sa.	5:45	5'6	17:58	6'6	11:58	1'4	.....	.....
25	Th.	5:16	5'5	17:38	6'2	11:34	1'1	.....	.....	25	S.	6:41	5'8	18:52	6'7	0:48	0'3	12:53	1'3
26	F.	6:10	5'8	18:26	6'5	0:16	0'6	12:20	1'0	26	M.	7:36	6'0	19:45	6'8	1:39	0'0	13:49	1'3
27	Sa.	7:01	6'0	19:13	6'8	1:03	0'3	13:07	1'0	27	Tu.	8:30	6'1	20:38	6'7	2:31-0'2	1'4	14:46	1'3
28	S.	7:51	6'2	20:01	6'9	1:50	0'0	13:57	1'1	28	W.	9:23	6'2	21:30	6'5	3:24-0'2	1'5	15:44	1'3
29	M.	8:43	6'2	20:50	6'8	2:40-0'1	1'4	14:51	1'2	29	Th.	10:16	6'1	22:23	6'2	4:18	0'0	16:43	1'4
30	Tu.	9:35	6'1	21:41	6'5	3:34-0'1	1'4	15:50	1'4	30	F.	11:08	6'0	23:16	5'8	5:12	0'2	17:43	1'5
31	W.	10:28	6'0	22:33	6'1	4:30	0'1	16:54	1'6										

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

THE DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23'4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax, are given on page 10.

JULY.										AUGUST.									
Date.	Day.	HIGH WATER.				LOW WATER.				Date.	Day.	HIGH WATER.				LOW WATER.			
		Time. H't.		Time. H't.		Time. H't.		Time. H't.				Time. H't.		Time. H't.		Time. H't.			
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.		
1	Sa.	.....	12:00	5.9	6:05	0.5	18:44	1.6	1	Tu.	0:34	5.3	13:02	5.6	7:16	1.6	20:03	1.8	
2	☾.	0:09	5.5	12:53	5.7	6:59	0.9	19:44	1.7	2	W.	1:26	5.0	13:55	5.5	8:08	2.0	20:58	1.9
3	M.	1:04	5.2	13:47	5.6	7:54	1.3	20:43	1.7	3	Th.	2:24	4.8	14:51	5.3	9:03	2.3	21:53	2.0
4	Tu.	2:03	5.0	14:41	5.5	8:50	1.7	21:40	1.7	4	F.	3:29	4.8	15:49	5.2	9:59	2.5	22:46	1.8
5	W.	3:06	4.8	15:35	5.5	9:45	2.0	22:34	1.7	5	Sa.	4:40	4.7	16:47	5.3	10:55	2.6	23:35	1.7
6	Th.	4:09	4.8	16:28	5.5	10:37	2.2	23:22	1.6	6	☾.	5:44	4.8	17:42	5.4	11:49	2.6	.....	.....
7	F.	5:10	4.9	17:19	5.6	11:26	2.3	.....	.....	7	M.	6:37	5.0	18:31	5.5	0:20	1.5	12:38	2.5
8	Sa.	6:06	5.0	18:08	5.6	0:05	1.5	12:13	2.4	8	Tu.	7:20	5.1	19:13	5.6	1:00	1.2	13:20	2.3
9	☾.	6:55	5.1	18:53	5.7	0:45	1.4	12:54	2.4	9	W.	7:56	5.2	19:52	5.7	1:38	1.0	13:57	2.1
10	M.	7:38	5.2	19:33	5.7	1:24	1.2	13:32	2.4	10	Th.	8:29	5.4	20:29	5.8	2:14	0.9	14:31	1.9
11	Tu.	8:16	5.3	20:10	5.7	2:02	1.1	14:08	2.3	11	F.	9:00	5.5	21:04	5.8	2:49	0.8	15:04	1.7
12	W.	8:52	5.3	20:46	5.7	2:39	1.0	14:44	2.2	12	Sa.	9:31	5.6	21:39	5.8	3:24	0.8	15:38	1.6
13	Th.	9:26	5.3	21:22	5.7	3:15	0.9	15:21	2.2	13	☾.	10:05	5.7	22:15	5.8	3:59	0.9	16:16	1.6
14	F.	10:01	5.4	21:58	5.6	3:50	0.9	16:00	2.1	14	M.	10:43	5.8	22:54	5.7	4:35	1.0	17:02	1.6
15	Sa.	10:37	5.4	22:37	5.6	4:26	1.0	16:42	2.1	15	Tu.	11:24	5.9	23:40	5.5	5:13	1.2	17:57	1.6
16	☾.	11:15	5.5	23:19	5.5	5:04	1.1	17:29	2.0	16	W.	.....	.....	12:10	5.9	5:57	1.5	18:59	1.6
17	M.	11:56	5.6	.....	.....	5:44	1.2	18:24	2.0	17	Th.	0:32	5.3	13:01	5.9	6:54	1.8	20:06	1.6
18	Tu.	0:04	5.4	12:40	5.7	6:28	1.4	19:27	1.9	18	F.	1:35	5.1	14:00	5.8	8:04	2.0	21:16	1.4
19	W.	0:56	5.3	13:29	5.8	7:21	1.6	20:33	1.7	19	Sa.	2:50	5.0	15:08	5.8	9:23	2.1	22:23	1.2
20	Th.	1:57	5.1	14:27	5.9	8:26	1.7	21:33	1.4	20	☾.	4:06	5.0	16:17	5.8	10:35	2.0	23:24	0.8
21	F.	3:07	5.1	15:33	6.0	9:33	1.8	22:39	1.1	21	M.	5:17	5.2	17:24	6.0	11:40	1.8	.....	.....
22	Sa.	4:20	5.2	16:38	6.2	10:39	1.8	23:36	0.7	22	Tu.	6:19	5.6	18:25	6.2	0:22	0.5	12:40	1.5
23	☾.	5:26	5.4	17:38	6.3	11:42	1.7	.....	.....	23	W.	7:10	5.9	19:20	6.3	1:15	0.2	13:37	1.2
24	M.	6:26	5.6	18:36	6.5	0:31	0.4	12:43	1.5	24	Th.	7:57	6.1	20:11	6.4	2:03	0.1	14:29	1.0
25	Tu.	7:22	5.9	19:31	6.6	1:25	0.1	13:43	1.3	25	F.	8:42	6.3	20:58	6.3	2:47	0.1	15:18	0.9
26	W.	8:14	6.1	20:24	6.6	2:17	0.1	14:41	1.2	26	Sa.	9:25	6.3	21:43	6.2	3:30	0.2	16:04	0.9
27	Th.	9:04	6.2	21:16	6.4	3:08	0.1	15:37	1.1	27	☾.	10:07	6.3	22:26	6.0	4:12	0.5	16:49	1.1
28	F.	9:51	6.3	22:06	6.2	3:58	0.0	16:31	1.1	28	M.	10:50	6.1	23:10	5.7	4:55	1.0	17:34	1.3
29	Sa.	10:37	6.2	22:55	6.0	4:47	0.3	17:24	1.3	29	Tu.	11:34	5.9	23:57	5.4	5:41	1.5	18:21	1.6
30	☾.	11:23	6.0	23:44	5.6	5:37	0.7	18:16	1.4	30	W.	.....	.....	12:20	5.6	6:30	1.9	19:14	1.8
31	M.	.....	12:11	5.8	6:26	1.1	19:09	1.6	31	Th.	0:49	5.1	13:09	5.4	7:21	2.4	20:11	2.0	

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

The DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23.4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax are given on page 10.

Date.	Day.	SEPTEMBER.								Date.	Day.	OCTOBER.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time.	H't.	Time.	H't.	Time.	H't.	Time.	H't.			Time.	H't.	Time.	H't.	Time.	H't.		
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.
1	F.	1:45	4.8	14:04	5.1	8:19	2.7	21:10	2.1	1	♂.	2:10	4.7	14:20	4.9	8:40	3.0	21:25	2.0
2	Sa.	2:50	4.6	15:06	5.0	9:25	2.8	22:08	2.0	2	M.	3:19	4.7	15:24	4.9	9:54	2.8	22:22	1.9
3	♂.	4:01	4.6	16:12	5.0	10:27	2.8	23:01	1.8	3	Tu.	4:25	4.8	16:28	5.0	10:46	2.6	23:09	1.6
4	M.	5:09	4.7	17:14	5.1	11:24	2.6	23:48	1.5	4	W.	5:21	5.0	17:27	5.3	11:34	2.2	23:51	1.3
5	Tu.	6:04	4.9	18:05	5.4	.....		12:12	2.3	5	Th.	6:06	5.3	18:16	5.6	.....		12:14	1.8
6	W.	6:49	5.1	18:50	5.6	0:31	1.3	12:51	2.0	6	F.	6:44	5.6	18:57	5.8	0:30	1.1	12:52	1.4
7	Th.	7:26	5.4	19:28	5.8	1:09	1.0	13:27	1.7	7	Sa.	7:20	5.9	19:36	6.0	1:07	0.9	13:29	1.1
8	F.	7:59	5.6	20:04	5.9	1:45	0.8	14:02	1.4	8	♂.	7:55	6.2	20:15	6.2	1:44	0.8	14:07	0.8
9	Sa.	8:29	5.8	20:40	6.0	2:20	0.7	14:38	1.2	9	M.	8:30	6.4	20:55	6.2	2:22	0.9	14:48	0.7
10	♂.	9:00	6.0	21:16	6.0	2:54	0.7	15:16	1.1	10	Tu.	9:06	6.5	21:36	6.1	3:01	1.0	15:36	0.7
11	M.	9:34	6.1	21:53	6.0	3:28	0.8	15:56	1.1	11	W.	9:45	6.5	22:19	6.0	3:43	1.3	16:28	0.8
12	Tu.	10:10	6.2	22:34	5.9	4:04	1.1	16:40	1.1	12	Th.	10:29	6.4	23:07	5.7	4:30	1.6	17:24	1.0
13	W.	10:53	6.2	23:22	5.6	4:45	1.4	17:31	1.2	13	F.	11:19	6.1	.....		5:26	2.0	18:25	1.2
14	Th.	11:44	6.1	.....		5:34	1.7	18:36	1.4	14	Sa.	0:05	5.4	12:18	5.8	6:42	2.3	19:35	1.3
15	F.	0:18	5.4	12:41	5.8	6:38	2.0	19:50	1.4	15	♂.	1:11	5.2	13:26	5.5	8:04	2.4	20:48	1.3
16	Sa.	1:22	5.1	13:44	5.6	8:00	2.3	21:03	1.3	16	M.	2:28	5.1	14:41	5.3	9:22	2.3	21:54	1.2
17	♂.	2:34	5.0	14:53	5.5	9:20	2.3	22:09	1.2	17	Tu.	3:42	5.2	15:55	5.3	10:28	2.0	22:51	1.1
18	M.	3:56	5.0	16:06	5.5	10:37	2.1	23:09	0.9	18	W.	4:47	5.5	17:00	5.4	11:27	1.6	23:42	1.0
19	Tu.	5:02	5.3	17:14	5.7	11:39	1.7	.....		19	Th.	5:39	5.7	17:58	5.6	.....		12:16	1.3
20	W.	6:00	5.6	18:14	5.9	0:04	0.7	12:32	1.4	20	F.	6:24	6.0	18:49	5.9	0:28	0.9	13:02	1.0
21	Th.	6:49	5.9	19:05	6.1	0:53	0.5	13:20	1.1	21	Sa.	7:06	6.2	19:33	6.0	1:11	1.0	13:45	0.9
22	F.	7:32	6.2	19:52	6.2	1:37	0.4	14:05	0.8	22	♂.	7:45	6.3	20:14	6.0	1:51	1.1	14:25	0.9
23	Sa.	8:12	6.3	20:33	6.2	2:19	0.5	14:48	0.8	23	M.	8:23	6.4	20:54	6.0	2:28	1.4	15:03	1.0
24	♂.	8:51	6.4	21:12	6.1	3:00	0.7	15:29	0.9	24	Tu.	9:01	6.3	21:34	5.9	3:04	1.6	15:39	1.1
25	M.	9:30	6.3	21:52	6.0	3:39	1.0	16:09	1.0	25	W.	9:40	6.1	22:14	5.7	3:39	2.0	16:14	1.3
26	Tu.	10:10	6.1	22:34	5.7	4:16	1.4	16:50	1.3	26	Th.	10:20	5.9	22:55	5.5	4:14	2.3	16:50	1.5
27	W.	10:53	5.9	23:21	5.4	4:52	1.9	17:33	1.6	27	F.	11:02	5.6	23:39	5.2	4:51	2.6	17:31	1.8
28	Th.	11:40	5.6	.....		5:29	2.3	18:20	1.8	28	Sa.	11:47	5.3	.....		5:36	2.8	18:25	1.9
29	F.	0:12	5.1	12:29	5.3	6:17	2.6	19:14	2.0	29	♂.	0:32	5.0	12:38	5.1	6:40	3.0	19:30	2.0
30	Sa.	1:09	4.9	13:22	5.1	7:20	2.9	20:20	2.1	30	M.	1:31	4.9	13:36	4.9	8:00	3.0	20:34	2.0
										31	Tu.	2:33	4.9	14:40	4.9	9:10	2.8	21:30	1.9

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

THE DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23.4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax, are given on page 10.



Date.	Day.	NOVEMBER.								Date.	Day.	DECEMBER.							
		HIGH WATER.				LOW WATER.						HIGH WATER.				LOW WATER.			
		Time. H't.	Time. H't.	Time. H't.	Time. H't.	Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.	Time. H't.			
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.		
1	W.	3:32 5'0	15:45 5'1	10:07 2'5	22:20 1'7	1	F.	3:30 5'5	15:51 5'3	10:10 2'0	22:19 1'7								
2	Th.	4:26 5'3	16:42 5'3	10:54 2'1	23:06 1'5	2	Sa.	4:19 5'9	16:49 5'6	11:01 1'6	23:08 1'6								
3	F.	5:14 5'6	17:32 5'6	11:39 1'7	23:49 1'3	3	S.	5:07 6'2	17:44 5'8	11:51 1'2	23:56 1'5								
4	Sa.	5:58 6'0	18:20 5'9	.....	12:23 1'2	4	M.	5:56 6'6	18:37 6'0	.....	12:41 0'8								
5	S.	6:40 6'3	19:06 6'1	0:30 1'2	13:06 0'9	5	Tu.	6:46 6'8	19:28 6'2	0:43 1'4	13:30 0'6								
6	M.	7:21 6'6	19:51 6'3	1:10 1'1	13:50 0'6	6	W.	7:36 7'0	20:18 6'3	1:31 1'4	14:20 0'3								
7	Tu.	8:02 6'8	20:37 6'3	1:51 1'1	14:35 0'4	7	Th.	8:27 7'0	21:09 6'3	2:22 1'5	15:12 0'3								
8	W.	8:44 6'8	21:24 6'3	2:34 1'3	15:22 0'4	8	F.	9:17 6'9	22:01 6'2	3:20 1'6	16:07 0'3								
9	Th.	9:28 6'7	22:13 6'1	3:23 1'5	16:15 0'5	9	Sa.	10:08 6'6	22:54 6'1	4:26 1'7	17:03 0'5								
10	F.	10:17 6'5	23:06 5'9	4:24 1'8	17:16 0'7	10	S.	11:02 6'2	23:49 6'0	5:33 1'9	18:00 0'7								
11	Sa.	11:11 6'2	.....	5:36 2'1	18:19 0'9	11	M.	.....	12:00 5'9	6:40 2'0	18:59 1'0								
12	S.	0:03 5'6	12:10 5'8	6:49 2'2	19:23 1'1	12	Tu.	0:48 5'8	13:02 5'5	7:44 2'0	20:00 1'2								
13	M.	1:03 5'5	13:14 5'5	8:00 2'2	20:26 1'2	13	W.	1:48 5'7	14:07 5'3	8:45 1'9	20:59 1'5								
14	Tu.	2:08 5'4	14:27 5'3	9:07 2'1	21:26 1'3	14	Th.	2:48 5'7	15:12 5'2	9:43 1'8	21:56 1'7								
15	W.	3:14 5'5	15:38 5'2	10:06 1'9	22:24 1'4	15	F.	3:46 5'8	16:15 5'2	10:39 1'7	22:49 1'6								
16	Th.	4:14 5'7	16:40 5'3	11:02 1'6	23:17 1'4	16	Sa.	4:39 5'9	17:14 5'3	11:31 1'6	23:38 2'1								
17	F.	5:10 5'9	17:36 5'5	11:53 1'4	.....	17	S.	5:26 6'0	18:05 5'4	.....	12:18 1'5								
18	Sa.	5:58 6'1	18:25 5'7	0:06 1'5	12:39 1'2	18	M.	6:09 6'0	18:50 5'5	0:22 2'2	13:00 1'4								
19	S.	6:39 6'2	19:09 5'8	0:50 1'6	13:21 1'1	19	Tu.	6:51 6'1	19:32 5'6	1:02 2'3	13:39 1'4								
20	M.	7:17 6'3	19:50 5'8	1:29 1'8	13:59 1'1	20	W.	7:32 6'1	20:12 5'6	1:39 2'4	14:15 1'3								
21	Tu.	7:54 6'3	20:30 5'8	2:03 2'0	14:35 1'2	21	Th.	8:12 6'0	20:51 5'6	2:14 2'5	14:49 1'3								
22	W.	8:31 6'2	21:10 5'7	2:35 2'2	15:10 1'3	22	F.	8:51 6'0	21:30 5'5	2:48 2'5	15:22 1'3								
23	Th.	9:09 6'1	21:51 5'6	3:07 2'4	15:44 1'4	23	S.	9:29 5'9	22:10 5'5	3:23 2'5	15:56 1'4								
24	F.	9:48 5'9	22:33 5'5	3:41 2'5	16:19 1'5	24	S.	10:08 5'7	22:51 5'4	4:00 2'6	16:34 1'5								
25	Sa.	10:29 5'6	23:17 5'3	4:19 2'7	16:57 1'6	25	M.	10:49 5'6	23:32 5'4	4:41 2'6	17:15 1'6								
26	S.	11:13 5'4	.....	5:08 2'8	17:44 1'8	26	Tu.	11:33 5'5	.....	5:30 2'6	18:00 1'7								
27	M.	0:06 5'2	12:01 5'3	6:07 2'9	18:37 1'9	27	W.	0:14 5'4	12:19 5'4	6:27 2'6	18:50 1'8								
28	Tu.	0:57 5'1	12:54 5'1	7:13 2'9	19:34 1'9	28	Th.	0:57 5'5	13:08 5'3	7:26 2'4	19:44 1'9								
29	W.	1:49 5'2	13:52 5'1	8:17 2'7	20:31 1'9	29	F.	1:43 5'6	14:02 5'3	8:26 2'2	20:39 1'9								
30	Th.	2:40 5'3	14:52 5'2	9:16 2'4	21:27 1'8	30	Sa.	2:34 5'8	15:02 5'3	9:27 1'9	21:35 1'9								
						31	S.	3:31 6'0	16:09 5'4	10:27 1'6	22:32 1'8								

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at ordinary Spring Tides; that is, from the same Datum to which the soundings are referred, on the Admiralty chart of Halifax harbour.

The DRY DOCK.—To find the depth of water on the sill of this dock at any tide, add 23'4 feet to the height of High Water as above given. The TIDAL DIFFERENCES referred to Halifax are given on page 19.

Date.	Day.	JANUARY.				Date.	Day.	FEBRUARY.											
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.									
		Time.	H't.	Time.	H't.			Time.	H't.	Time.	H't.								
		H. M.	FT.	H. M.	FT.			H. M.	FT.	H. M.	FT.								
1	S.	0:03	22.2	12:22	23.8	6:09	5.3	18:27	3.8	1	W.	9:55	23.0	13:07	24.4	6:53	3.2	19:15	2.0
2	M.	0:37	22.2	12:58	23.8	6:44	4.8	19:01	3.4	2	Th.	1:32	23.4	13:45	24.5	7:32	2.7	19:52	1.8
3	Tu.	1:15	22.2	13:35	23.8	7:21	4.6	19:38	3.0	3	F.	2:11	23.8	14:26	24.5	8:15	2.3	20:36	1.8
4	W.	1:56	22.3	14:14	23.7	8:01	4.3	20:21	2.9	4	Sa.	2:54	24.0	15:13	24.1	9:04	2.2	21:27	2.1
5	Th.	2:40	22.5	14:58	23.6	8:45	4.0	21:07	2.8	5	S.	3:43	24.2	16:08	23.6	9:57	2.3	22:21	2.6
6	F.	3:26	22.8	15:45	23.5	9:32	3.8	21:56	2.8	6	M.	4:37	24.1	17:07	23.0	10:54	2.5	23:19	3.2
7	Sa.	4:15	23.0	16:37	23.2	10:22	3.5	22:49	3.0	7	Tu.	5:35	24.0	18:11	22.4	11:55	2.8	.....	.....
8	S.	5:06	23.3	17:35	23.0	11:16	3.2	23:45	3.2	8	W.	6:38	23.8	19:18	22.2	0:20	3.8	13:03	3.0
9	M.	6:02	23.6	18:34	22.8	.....	.....	12:15	3.0	9	Th.	7:43	24.0	20:26	22.3	1:30	4.1	14:12	2.8
10	Tu.	7:02	24.0	19:35	22.9	0:44	3.3	13:17	2.7	10	F.	8:49	24.4	21:30	22.9	2:38	3.9	15:13	2.3
11	W.	8:03	24.7	20:37	23.2	1:46	3.3	14:22	2.1	11	Sa.	9:53	25.0	22:28	23.6	3:40	3.3	16:11	1.6
12	Th.	9:03	25.4	21:38	23.7	2:50	3.0	15:28	1.4	12	S.	10:52	25.6	23:20	24.3	4:39	2.5	17:06	1.0
13	F.	10:02	26.1	22:38	24.3	3:52	2.5	16:30	0.7	13	M.	11:44	25.9	.....	.....	5:34	1.7	17:58	0.7
14	Sa.	11:00	26.6	23:34	24.8	4:51	2.1	17:26	0.3	14	Tu.	0:09	24.8	12:32	25.9	6:25	1.4	18:47	0.8
15	S.	11:55	26.8	.....	.....	5:46	1.7	18:17	0.2	15	W.	0:56	24.9	13:18	25.5	7:10	1.5	19:34	1.3
16	M.	0:27	25.0	12:46	26.6	6:37	1.6	19:06	0.4	16	Th.	1:42	24.7	14:03	24.9	7:53	1.8	20:19	2.0
17	Tu.	1:18	24.8	13:36	26.0	7:26	1.8	19:54	1.0	17	F.	2:27	24.3	14:48	24.0	8:37	2.4	21:02	2.9
18	W.	2:08	24.5	14:25	25.2	8:16	2.3	20:42	1.8	18	Sa.	3:12	23.8	15:34	23.1	9:22	3.2	21:44	3.9
19	Th.	2:57	24.0	15:14	24.3	9:06	2.9	21:30	2.7	19	S.	3:58	23.1	16:22	22.2	10:08	4.1	22:27	5.0
20	F.	3:47	23.5	16:04	23.3	9:57	3.6	22:19	3.6	20	M.	4:46	22.4	17:13	21.3	10:56	4.8	23:15	5.7
21	Sa.	4:37	23.0	16:55	22.3	10:48	4.2	23:09	4.5	21	Tu.	5:36	21.9	18:07	20.6	11:48	5.4	.....	.....
22	S.	5:28	22.4	17:48	21.6	11:40	4.8	.....	.....	22	W.	6:29	21.5	19:03	20.2	0:09	6.3	12:43	5.8
23	M.	6:20	22.1	18:43	21.0	0:00	5.3	12:34	5.2	23	Th.	7:23	21.4	20:00	20.2	1:07	6.8	13:40	5.7
24	Tu.	7:13	21.9	19:40	20.7	0:53	5.8	13:28	5.4	24	F.	8:17	21.6	20:56	20.4	2:05	6.6	14:37	5.4
25	W.	8:06	22.0	20:36	20.7	1:47	6.0	14:22	5.3	25	Sa.	9:10	22.1	21:47	21.0	3:00	6.0	15:29	4.8
26	Th.	8:59	22.2	21:28	20.9	2:42	6.0	15:15	5.0	26	S.	10:00	22.8	22:32	21.9	3:48	5.3	16:14	3.8
27	F.	9:50	22.6	22:16	21.3	3:36	5.7	16:06	4.5	27	M.	10:46	23.6	23:13	22.7	4:30	4.4	16:55	3.0
28	Sa.	10:36	23.0	23:00	21.7	4:24	5.3	16:51	3.9	28	Tu.	11:28	24.2	23:51	23.4	5:10	3.4	17:35	2.0
29	S.	11:16	23.5	23:40	22.1	5:04	4.8	17:29	3.3										
30	M.	11:54	23.8	.....	.....	5:40	4.2	18:05	2.8										
31	Tu.	0:18	22.5	12:31	24.2	6:16	3.7	18:40	2.3										

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately  $1\frac{1}{2}$  feet lower than the datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy, are given on page 11.

Date.	Day.	MARCH.				Date.	Day.	APRIL.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	W.	.....	12:05 24.8	5:49 2.4	18:14 1.5	1	Sa.	0:34 26.5	12:58 26.1	6:50 0.0	19:09 0.8
2	Th.	0:26 24.2	12:41 25.2	6:29 1.5	18:53 1.1	2	S.	1:17 26.7	13:46 25.7	7:35 0.0	19:56 1.3
3	F.	1:02 24.9	13:18 25.4	7:10 1.1	19:34 1.1	3	M.	2:07 26.5	14:37 24.9	8:23 0.5	20:47 2.3
4	Sa.	1:40 25.3	14:02 25.2	7:53 0.9	20:18 1.3	4	Tu.	3:03 25.8	15:32 24.0	9:16 1.3	21:44 3.4
5	S.	2:26 25.4	14:52 24.7	8:40 1.1	21:07 1.9	5	W.	4:02 24.9	16:33 22.9	10:15 2.4	22:47 4.5
6	M.	3:17 25.2	15:49 23.8	9:33 1.5	22:00 2.8	6	Th.	5:04 23.9	17:40 22.1	11:22 3.4	23:56 5.2
7	Tu.	4:14 24.6	16:50 23.0	10:31 2.3	22:58 3.8	7	F.	6:10 23.1	18:51 21.8	.....	12:32 4.1
8	W.	5:16 23.9	17:55 22.1	11:35 3.0	.....	8	Sa.	7:18 22.8	20:04 22.0	1:07 5.2	13:42 4.0
9	Th.	6:23 23.4	19:02 21.8	0:03 4.6	12:44 3.6	9	S.	8:27 23.1	21:10 22.9	2:17 4.6	14:50 3.6
10	F.	7:32 23.3	20:12 22.0	1:13 4.8	13:55 3.6	10	M.	9:30 23.6	22:04 23.7	3:20 3.7	15:50 3.0
11	Sa.	8:41 23.6	21:21 22.6	2:28 4.6	15:05 3.0	11	Tu.	10:23 24.2	22:47 24.4	4:13 2.7	16:40 2.5
12	S.	9:44 24.2	22:20 23.5	3:36 3.6	16:07 2.3	12	W.	11:08 24.5	23:27 24.8	4:58 2.1	17:22 2.4
13	M.	10:40 24.8	23:10 24.2	4:34 2.6	17:00 1.6	13	Th.	11:49 24.5	.....	5:38 1.9	18:02 2.6
14	Tu.	11:30 25.2	23:54 24.8	5:22 1.8	17:46 1.3	14	F.	0:06 25.0	12:27 24.2	6:17 2.0	18:40 3.1
15	W.	.....	12:14 25.2	6:07 1.4	18:29 1.5	15	Sa.	0:44 24.9	13:03 23.9	6:55 2.3	19:16 3.8
16	Th.	0:33 24.9	12:53 25.0	6:50 1.5	19:08 2.0	16	S.	1:22 24.5	13:40 23.3	7:32 3.0	19:51 4.5
17	F.	1:10 24.9	13:31 24.4	7:30 1.8	19:45 2.8	17	M.	2:01 24.1	14:19 22.6	8:09 3.6	20:28 5.2
18	Sa.	1:48 24.5	14:10 23.7	8:07 2.5	20:21 3.6	18	Tu.	2:42 23.5	15:02 22.0	8:48 4.2	21:08 5.9
19	S.	2:29 24.0	14:51 22.9	8:44 3.3	21:00 4.5	19	W.	3:25 22.8	15:50 21.3	9:32 5.0	21:53 6.5
20	M.	3:13 23.3	15:36 22.0	9:23 4.0	21:43 5.4	20	Th.	4:12 22.0	16:46 20.7	10:23 5.4	22:44 7.0
21	Tu.	4:00 22.6	16:24 21.2	10:06 4.3	22:31 6.1	21	F.	5:04 21.6	17:47 20.4	11:17 5.7	23:38 7.1
22	W.	4:51 21.9	17:20 20.6	10:54 5.5	23:25 6.8	22	Sa.	6:01 21.4	18:46 20.5	.....	12:12 5.7
23	Th.	5:47 21.4	18:20 20.1	11:52 5.9	.....	23	S.	6:59 21.5	19:40 21.2	0:34 6.7	13:08 5.4
24	F.	6:45 21.2	19:19 20.0	0:23 7.1	12:54 5.9	24	M.	7:56 22.0	20:31 22.1	1:31 5.9	14:03 4.6
25	Sa.	7:43 21.3	20:16 20.6	1:22 6.9	13:54 5.6	25	Tu.	8:48 22.9	21:18 23.4	2:27 4.7	14:54 3.7
26	S.	8:35 22.0	21:09 21.4	2:19 6.1	14:49 4.8	26	W.	9:37 24.0	22:02 24.8	3:20 3.3	15:42 2.6
27	M.	9:23 22.8	21:58 22.5	3:10 5.0	15:38 3.8	27	Th.	10:24 25.1	22:45 26.1	4:09 1.8	16:29 1.6
28	Tu.	10:08 23.7	22:42 23.6	3:56 3.8	16:22 2.6	28	F.	11:09 25.9	23:27 27.0	4:54 0.6	17:15 1.0
29	W.	10:51 24.7	23:20 24.8	4:40 2.4	17:04 1.7	29	Sa.	11:53 26.3	.....	5:39—0.3	18:00 0.8
30	Th.	11:32 25.5	23:56 25.8	5:23 1.3	17:45 1.0	30	S.	0:10 27.6	12:38 26.4	6:24—0.6	18:46 1.1
31	F.	.....	12:13 26.0	6:06 0.4	18:26 0.7						

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately 1½ feet lower than the datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy, are given on page 11.



		MAY.						JUNE.											
Date.	Day.	HIGH WATER.		LOW WATER.		Date.	Day.	HIGH WATER.		LOW WATER.									
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.								
		H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.	H. M.	FT.								
1	M.	0:56	27.7	13:27	25.9	7:12	0.3	19:34	1.7	1	Th.	2:33	26.4	15:14	24.3	8:56	1.3	21:25	3.5
2	Tu.	1:46	27.2	14:20	25.1	8:06	0.4	20:28	2.7	2	F.	3:33	25.2	16:17	23.7	9:55	2.3	22:28	4.2
3	W.	2:43	26.2	15:18	24.1	9:03	1.4	21:30	3.8	3	Sa.	4:34	24.2	17:21	23.2	10:56	3.2	23:32	4.6
4	Th.	3:45	25.0	16:22	23.1	10:04	2.6	22:38	4.6	4	§.	5:39	23.2	18:23	22.9	.....	.....	12:00	4.0
5	F.	4:52	23.9	17:31	22.5	11:09	3.5	23:50	5.1	5	M.	6:44	22.6	19:22	22.9	0:35	4.8	13:03	4.4
6	Sa.	6:01	23.1	18:42	22.3	.....	.....	12:19	4.1	6	Tu.	7:45	22.3	20:18	23.1	1:34	4.7	14:02	4.6
7	§.	7:10	22.8	19:52	22.6	1:00	5.2	13:28	4.3	7	W.	8:40	22.3	21:09	23.5	2:28	4.4	14:56	4.7
8	M.	8:13	22.8	20:48	23.1	2:04	4.6	14:30	4.1	8	Th.	9:31	22.4	21:56	23.8	3:19	4.0	15:46	4.8
9	Tu.	9:08	23.1	21:36	23.7	3:02	3.9	15:26	3.9	9	F.	10:17	22.6	22:38	24.1	4:07	3.8	16:31	4.8
10	W.	9:58	23.5	22:18	24.3	3:53	3.3	16:15	3.8	10	Sa.	11:00	22.7	23:17	24.3	4:51	3.6	17:11	4.9
11	Th.	10:43	23.6	22:57	24.7	4:39	2.8	16:56	3.7	11	§.	11:40	22.7	23:54	24.3	5:31	3.5	17:47	5.1
12	F.	11:24	23.7	23:34	24.8	5:18	2.7	17:33	3.9	12	M.	.....	.....	12:17	22.6	6:07	3.6	18:21	5.3
13	Sa.	.....	.....	12:01	23.5	5:53	2.8	18:08	4.2	13	Tu.	0:30	24.1	12:52	22.4	6:42	3.7	18:55	5.5
14	§.	0:10	24.7	12:36	23.3	6:28	3.1	18:42	4.7	14	W.	1:06	24.0	13:28	22.3	7:17	3.8	19:31	5.7
15	M.	0:47	24.5	13:12	22.9	7:04	3.5	19:17	5.2	15	Th.	1:43	23.6	14:07	22.0	7:53	4.0	20:10	5.8
16	Tu.	1:26	24.1	13:50	22.4	7:41	3.9	19:54	5.7	16	F.	2:22	23.2	14:50	21.9	8:31	4.1	20:54	5.7
17	W.	2:07	23.6	14:33	21.9	8:19	4.3	20:34	6.2	17	Sa.	3:05	22.9	15:36	21.9	9:13	4.2	21:40	5.6
18	Th.	2:50	23.0	15:21	21.5	9:00	4.6	21:21	6.5	18	§.	3:53	22.7	16:26	22.0	10:02	4.2	22:29	5.3
19	F.	3:36	22.4	16:12	21.2	9:46	5.0	22:11	6.6	19	M.	4:45	22.5	17:18	22.3	10:54	4.1	23:22	4.9
20	Sa.	4:26	22.0	17:04	21.1	10:36	5.2	23:04	6.4	20	Tu.	5:39	22.5	18:12	22.9	11:49	4.0	.....	.....
21	§.	5:26	21.9	17:57	21.4	11:29	5.1	23:59	6.0	21	W.	6:34	22.7	19:07	23.7	0:18	4.3	12:45	3.9
22	M.	6:17	21.9	18:50	22.0	.....	.....	12:24	4.8	22	Th.	7:30	23.0	20:03	24.6	1:17	3.5	13:42	3.5
23	Tu.	7:14	22.4	19:42	23.0	0:57	5.3	13:19	4.3	23	F.	8:27	23.6	21:00	25.6	2:18	2.6	14:40	3.0
24	W.	8:09	23.1	20:34	24.2	1:54	4.1	14:14	3.5	24	Sa.	9:26	24.2	21:56	26.7	3:19	1.6	15:38	2.4
25	Th.	9:01	24.1	21:26	25.6	2:48	2.8	15:08	2.7	25	§.	10:24	25.0	22:51	27.5	4:17	0.7	16:35	1.9
26	F.	9:53	25.0	22:17	26.9	3:40	1.5	16:01	1.9	26	M.	11:20	25.5	23:43	27.8	5:10	0.0	17:31	1.6
27	Sa.	10:44	25.6	23:07	27.6	4:30	0.4	16:53	1.4	27	Tu.	.....	.....	12:15	25.7	6:02	0.3	18:25	1.6
28	§.	11:34	26.1	23:56	28.0	5:20	0.3	17:43	1.2	28	W.	0:35	27.7	13:09	25.7	6:55	0.2	19:17	1.8
29	M.	.....	.....	12:25	26.2	6:11	0.5	18:34	1.4	29	Th.	1:23	27.2	14:03	25.2	7:48	0.4	20:11	2.2
30	Tu.	0:45	28.0	13:18	25.8	7:04	0.3	19:27	2.0	30	F.	2:22	26.3	14:58	24.8	8:40	1.1	21:06	2.8
31	W.	1:36	27.4	14:14	25.2	7:59	0.4	20:24	2.8										

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately  $1\frac{1}{2}$  feet lower than the Datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy, are given on page 11.

Date.	Day.	JULY.				Date.	Day.	AUGUST.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. M't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	Sa.	3:17 25.3	15:54 24.2	9:33 2.0	22:02 3.5	1	Tu.	4:35 22.9	17:08 23.1	10:48 4.1	23:22 4.5
2	S.	4:13 24.2	16:51 23.6	10:27 3.0	23:00 4.1	2	W.	5:28 21.9	18:03 22.6	11:41 5.1	.....
3	M.	5:10 23.1	17:49 23.2	11:23 3.9	23:59 4.6	3	Th.	6:25 21.1	18:58 22.2	0:19 5.1	12:38 5.9
4	Tu.	6:08 22.3	18:46 22.9	.....	12:21 4.7	4	F.	7:25 20.7	19:52 22.1	1:17 5.5	13:37 6.3
5	W.	7:05 21.8	19:41 22.8	0:58 4.9	13:20 5.3	5	Sa.	8:23 20.6	20:45 22.2	2:14 5.5	14:35 6.4
6	Th.	8:01 21.5	20:32 22.9	1:56 5.0	14:19 5.6	6	S.	9:17 20.7	21:36 22.6	3:08 5.3	15:31 6.1
7	F.	8:55 21.5	21:21 23.1	2:51 4.9	15:14 5.7	7	M.	10:08 21.1	22:23 22.9	3:57 4.8	16:20 5.7
8	Sa.	9:46 21.6	22:07 23.4	3:42 4.6	16:03 5.7	8	Tu.	10:55 21.6	23:04 23.4	4:40 4.2	17:01 5.2
9	S.	10:33 21.8	22:50 23.6	4:27 4.3	16:47 5.5	9	W.	11:36 22.0	23:41 23.8	5:18 3.6	17:36 4.6
10	M.	11:16 22.0	23:30 23.8	5:06 4.0	17:27 5.3	10	Th.	.....	12:13 22.5	5:54 3.1	18:10 4.1
11	Tu.	11:56 22.2	.....	5:43 3.8	18:04 5.2	11	F.	0:17 24.0	12:48 22.9	6:29 2.7	18:45 3.6
12	W.	0:08 23.8	12:33 22.2	6:19 3.6	18:39 5.0	12	Sa.	0:54 24.2	13:22 23.3	7:04 2.4	19:22 3.2
13	Th.	0:44 23.8	13:09 22.3	6:54 3.4	19:13 4.9	13	S.	1:32 24.2	13:59 23.6	7:40 2.2	20:02 2.8
14	F.	1:21 23.8	13:45 22.4	7:30 3.3	19:48 4.7	14	M.	2:12 24.3	14:35 24.0	8:18 2.2	20:45 2.6
15	Sa.	2:00 23.6	14:23 22.6	8:08 3.2	20:26 4.4	15	Tu.	2:55 24.0	15:19 24.2	8:59 2.4	21:32 2.5
16	S.	2:41 23.5	15:05 22.9	8:49 3.1	21:09 4.1	16	W.	3:45 23.6	16:10 24.2	9:44 2.7	22:23 2.7
17	M.	3:25 23.4	15:53 23.1	9:35 3.1	21:58 3.9	17	Th.	4:40 23.0	17:06 24.0	10:37 3.3	23:20 3.0
18	Tu.	4:14 23.2	16:45 23.3	10:26 3.2	22:51 3.7	18	F.	5:38 22.4	18:08 23.9	11:39 3.9	.....
19	W.	5:06 22.9	17:40 23.6	11:20 3.5	23:48 3.5	19	Sa.	6:41 22.0	19:13 24.0	0:25 3.2	12:57 4.3
20	Th.	6:02 22.6	18:37 23.9	.....	12:16 3.7	20	S.	7:47 22.1	20:18 24.3	1:34 3.1	14:07 4.2
21	F.	7:02 22.5	19:35 24.5	0:48 3.2	13:15 3.8	21	M.	8:54 22.7	21:22 25.0	2:42 2.6	15:10 3.6
22	Sa.	8:05 22.8	20:34 25.2	1:51 2.8	14:17 3.6	22	Tu.	9:57 23.6	22:21 25.7	3:45 1.7	16:10 2.7
23	S.	9:09 23.4	21:34 26.0	2:55 2.6	15:20 3.1	23	W.	10:54 24.4	23:14 26.3	4:44 1.0	17:07 1.7
24	M.	10:09 24.1	22:32 26.7	3:57 1.2	16:20 2.4	24	Th.	11:45 25.1	.....	5:37 0.3	18:00 1.1
25	Tu.	11:06 24.8	23:27 27.2	4:56 0.4	17:18 1.8	25	F.	0:04 26.5	12:33 25.5	6:25 0.3	18:48 0.9
26	W.	.....	12:01 25.3	5:51 0.0	18:12 1.4	26	Sa.	0:51 26.2	13:19 25.6	7:09 0.6	19:33 1.2
27	Th.	0:20 27.2	12:54 25.5	6:42 0.0	19:02 1.3	27	S.	1:36 25.6	14:04 25.1	7:53 1.3	20:17 1.7
28	F.	1:12 26.8	13:46 25.4	7:30 0.3	19:51 1.5	28	M.	2:21 24.8	14:49 24.6	8:37 2.3	21:02 2.5
29	Sa.	2:04 26.1	14:37 25.1	8:18 1.0	20:41 2.1	29	Tu.	3:08 23.7	15:35 23.9	9:22 3.4	21:49 3.6
30	S.	2:55 25.1	15:27 24.4	9:07 1.9	21:32 2.9	30	W.	4:00 22.7	16:25 23.0	10:08 4.6	22:39 4.6
31	M.	3:45 24.0	16:16 23.8	9:57 3.0	22:26 3.7	31	Th.	4:55 21.6	17:19 22.3	10:59 5.6	23:33 5.3

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately 1½ feet lower than the Datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy are given on page 11.

SEPTEMBER.						OCTOBER.					
Date.	Day.	HIGH WATER.		LOW WATER.		Date.	Day.	HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	F.	5:52 20.7	18:16 21.8	11:56 6.4	.....	1	☾	6:06 20.0	18:32 21.1	.....	12:13 7.1
2	Sa.	6:50 20.2	19:14 21.5	0:29 5.9	12:55 6.9	2	M.	7:06 20.0	19:28 21.3	0:39 6.0	13:13 7.6
3	☾	7:48 20.0	20:10 21.6	1:27 6.0	13:55 6.9	3	Tu.	8:05 20.4	20:22 21.8	1:40 5.8	14:12 6.4
4	M.	8:45 20.2	21:03 22.0	2:26 5.7	14:54 6.4	4	W.	9:00 21.1	21:12 22.4	2:38 5.1	15:05 5.4
5	Tu.	9:38 20.9	21:52 22.6	3:22 5.0	15:47 5.6	5	Th.	9:48 22.1	21:58 23.2	3:30 4.2	15:52 4.3
6	W.	10:23 21.7	22:34 23.3	4:12 4.2	16:32 4.7	6	F.	10:30 23.1	22:40 24.1	4:13 3.2	16:34 3.1
7	Th.	11:02 22.5	23:13 23.9	4:52 3.4	17:09 3.9	7	Sa.	11:08 24.1	23:20 24.8	4:52 2.3	17:14 2.6
8	F.	11:39 23.2	23:49 24.3	5:28 2.6	17:44 3.0	8	☾	11:44 25.0	23:59 25.3	5:30 1.7	17:53 1.2
9	Sa.	.....	12:14 23.9	6:02 2.0	18:19 2.2	9	M.	.....	12:21 25.9	6:08 1.3	18:33 0.6
10	☾	0:24 24.8	12:47 24.5	6:36 1.6	18:55 1.6	10	Tu.	0:39 25.4	13:01 26.3	6:47 1.2	19:16 0.4
11	M.	1:00 24.9	13:22 25.0	7:12 1.5	19:34 1.4	11	W.	1:21 25.3	13:45 26.3	7:29 1.5	20:02 0.7
12	Tu.	1:41 24.9	14:04 25.2	7:51 1.6	20:17 1.3	12	Th.	2:06 24.8	14:34 25.9	8:16 2.1	20:51 1.2
13	W.	2:30 24.5	14:53 25.1	8:37 2.0	21:08 1.6	13	F.	2:56 24.0	15:26 25.2	9:08 3.1	21:47 2.0
14	Th.	3:23 23.9	15:47 24.8	9:29 2.8	22:03 2.2	14	Sa.	3:54 23.1	16:24 24.3	10:09 4.0	22:50 2.9
15	F.	4:19 23.0	16:46 24.2	10:26 3.6	23:02 2.9	15	☾	5:00 22.4	17:33 23.5	11:17 4.8	23:58 3.7
16	Sa.	5:19 22.3	17:49 23.7	11:28 4.4	.....	16	M.	6:12 22.0	18:44 23.0	.....	12:28 5.1
17	☾	6:26 21.8	18:57 23.4	0:07 3.4	12:38 4.7	17	Tu.	7:25 22.1	19:56 23.1	1:08 3.9	13:40 4.6
18	M.	7:36 21.9	20:06 23.7	1:16 3.5	13:49 4.7	18	W.	8:34 22.7	21:00 23.6	2:17 3.5	14:50 3.8
19	Tu.	8:43 22.5	21:09 24.2	2:25 3.1	14:59 3.8	19	Th.	9:33 23.5	21:55 24.2	3:20 2.9	15:51 2.7
20	W.	9:44 23.4	22:07 24.9	3:33 2.4	16:03 2.7	20	F.	10:22 24.4	22:42 24.6	4:13 2.3	16:40 1.9
21	Th.	10:39 24.4	23:00 25.4	4:31 1.5	16:57 1.6	21	Sa.	11:04 25.0	23:25 24.7	4:58 2.1	17:24 1.6
22	F.	11:28 25.2	23:47 25.6	5:20 1.1	17:44 1.1	22	☾	11:45 25.2	.....	5:39 2.2	18:05 1.5
23	Sa.	.....	12:12 25.4	6:04 1.0	18:28 0.9	23	M.	0:06 24.5	12:26 25.1	6:20 2.6	18:44 1.9
24	☾	0:31 25.4	12:55 25.5	6:46 1.3	19:09 1.3	24	Tu.	0:48 24.0	13:06 24.9	7:00 3.3	19:22 2.6
25	M.	1:14 25.0	13:37 25.1	7:27 2.1	19:50 1.9	25	W.	1:30 23.4	13:47 24.3	7:39 4.1	20:00 3.3
26	Tu.	1:58 24.2	14:19 24.5	8:08 3.1	20:32 2.8	26	Th.	2:13 22.7	14:30 23.7	8:19 4.9	20:39 4.1
27	W.	2:42 23.2	15:03 23.8	8:50 4.1	21:15 3.8	27	F.	2:57 22.0	15:15 22.9	9:00 5.7	21:20 4.7
28	Th.	3:27 22.3	15:51 23.0	9:33 5.1	22:00 4.7	28	Sa.	3:43 21.4	16:03 22.2	9:44 6.3	22:07 5.3
29	F.	4:16 21.3	16:43 22.2	10:21 6.0	22:49 5.4	29	☾	4:34 20.7	16:54 21.6	10:33 6.8	23:02 5.6
30	Sa.	5:09 20.6	17:37 21.5	11:14 6.8	23:41 5.9	30	M.	5:31 20.4	17:50 21.3	11:27 6.9	23:59 5.8
						31	Tu.	6:28 20.4	18:45 21.3	.....	12:23 6.7

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately  $1\frac{1}{2}$  feet lower than the Datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy, are given on page 11.



Date.	Day.	NOVEMBER.				Date.	Day.	DECEMBER.			
		HIGH WATER.		LOW WATER.				HIGH WATER.		LOW WATER.	
		Time. H't.	Time. H't.	Time. H't.	Time. H't.			Time. H't.	Time. H't.	Time. H't.	Time. H't.
		H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.			H. M. FT.	H. M. FT.	H. M. FT.	H. M. FT.
1	W.	7:24 20'8	19:39 21'7	0:57 5'5	13:20 6'1	1	F.	7:29 22'2	19:51 22'4	1:04 4'5	13:34 4'5
2	Th.	8:15 21'7	20:32 22'3	1:53 4'9	14:15 5'1	2	Sa.	8:19 23'2	20:43 23'1	1:57 3'9	14:27 3'5
3	F.	9:03 22'7	21:22 23'1	2:42 4'1	15:06 3'9	3	§.	9:08 24'5	21:33 23'9	2:48 3'2	15:20 2'2
4	Sa.	9:45 23'9	22:08 24'0	3:26 3'2	15:52 2'6	4	M.	9:56 25'6	22:22 24'7	3:38 2'5	16:12 1'1
5	§.	10:25 25'1	22:49 25'0	4:09 2'4	16:37 1'4	5	Tu.	10:45 26'7	23:10 25'2	4:29 1'8	17:03 0'3
6	M.	11:06 26'2	23:30 25'5	4:53 1'6	17:21 0'5	6	W.	11:33 27'4	23:59 25'7	5:20 1'4	17:53—0'3
7	Tu.	11:49 26'9	.....	5:38 1'2	18:06 0'0	7	Th.	.....	12:22 27'6	6:10 1'3	18:42—0'4
8	W.	0:14 25'7	12:34 27'2	6:25 1'2	18'52—0'2	8	F.	0:50 25'5	13:13 27'3	7:01 1'5	19:32 0'0
9	Th.	1:02 25'5	13:22 27'0	7:14 1'6	19:40 0'2	9	Sa.	1:43 25'1	14:07 26'6	7:53 2'0	20:23 0'7
10	F.	1:54 25'0	14:16 26'4	8:06 2'2	20:33 1'0	10	§.	2:40 24'5	15:05 25'7	8:48 2'6	21:18 1'5
11	Sa.	2:51 24'2	15:14 25'5	9:02 3'1	21:32 1'8	11	M.	3:41 23'9	16:05 24'7	9:48 3'2	22:18 2'3
12	§.	3:52 23'4	16:17 24'4	10:02 3'9	22:34 2'8	12	Tu.	4:44 23'4	17:08 23'7	10:53 3'7	23:23 3'1
13	M.	4:57 22'8	17:25 23'4	11:07 4'5	23:39 3'5	13	W.	5:48 23'1	18:11 22'9	.....	12:00 4'0
14	Tu.	6:06 22'4	18:36 23'0	.....	12:18 4'6	14	Th.	6:49 22'8	19:12 22'4	0'28 3'7	13:04 4'1
15	W.	7:14 22'6	19:43 22'9	0:48 3'8	13:27 4'3	15	F.	7:46 22'9	20:10 22'2	1:29 4'1	14:03 4'0
16	Th.	8:15 23'1	20:42 23'0	1:54 3'8	14:29 3'8	16	Sa.	8:39 23'1	21:05 22'2	2:27 4'3	15:00 3'8
17	F.	9:08 23'5	21:33 23'3	2:53 3'6	15:26 3'1	17	§.	9:30 23'5	21:56 22'3	3:20 4'4	15:51 3'5
18	Sa.	9:56 24'1	22:21 25'5	3:45 3'3	16:16 2'6	18	M.	10:17 23'7	22:44 22'4	4:09 4'5	16:36 3'4
19	§.	10:39 24'5	23:06 23'5	4:34 3'3	17:01 2'4	19	Tu.	11:00 24'0	23:26 22'4	4:50 4'6	17:17 3'3
20	M.	11:20 24'7	23:48 23'3	5:17 3'5	17:42 2'4	20	W.	11:39 24'0	.....	5:30 4'7	17:55 3'4
21	Tu.	.....	12:00 24'6	5:57 3'8	18:21 2'8	21	Th.	0:05 22'3	12:17 23'9	6:09 4'9	18:32 3'5
22	W.	0:28 23'0	12:39 24'4	6:34 4'3	18:59 3'2	22	F.	0:43 22'2	12:54 23'7	6:47 5'0	19:09 3'7
23	Th.	1:08 22'8	13:19 24'0	7:10 4'8	19:36 3'7	23	Sa.	1:20 22'1	13:31 23'5	7:25 5'2	19:47 3'8
24	F.	1:47 22'3	14:01 23'6	7:46 5'3	20:13 4'1	24	§.	1:58 21'9	14:10 23'1	8:04 5'3	20:26 3'9
25	Sa.	2:27 21'9	14:45 23'0	8:24 5'8	20:52 4'5	25	M.	2:37 21'7	14:52 22'7	8:44 5'3	21:06 4'0
26	§.	3:11 21'5	15:31 22'4	9:07 6'1	21:35 4'8	26	Tu.	3:19 21'7	15:37 22'4	9:25 5'3	21:47 4'1
27	M.	3:58 21'1	16:19 22'0	9:56 6'2	22:24 5'0	27	W.	4:04 21'7	16:24 22'2	10:09 5'1	22:31 4'1
28	T.	4:49 21'0	17:10 21'7	10:50 6'2	23:16 5'0	28	Th.	4:53 21'9	17:14 22'0	11:00 4'8	23:20 4'1
29	W.	5:42 21'0	18:03 21'6	11:45 5'9	.....	29	F.	5:46 22'2	18:07 22'1	11:55 4'4	.....
30	Th.	6:36 21'5	18:57 21'8	0:10 4'9	12:40 5'4	30	Sa.	6:41 22'8	19:04 22'2	0:14 4'0	12:52 3'8
						31	§.	7:37 23'6	20:03 22'6	1:13 3'8	13:50 3'1

The TIME used is Atlantic Standard, for the 60th Meridian, which is four hours slower than Greenwich Mean Time. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT is measured from the level of Low Water at Spring Tides, as ascertained by the tide gauge observations themselves. (This level is approximately  $1\frac{1}{2}$  feet lower than the datum to which the soundings on the chart of St. John harbour are referred, as nearly as this can now be ascertained.)

TIDAL DIFFERENCES and other information for the Bay of Fundy, are given on page 11.

## JANUARY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	S.	H. M.	H. M.	H. M.	H. M.	
2	M.	11 15	23 30	4 54	17 12	
3	Tu.	11 51	.....	5 29	17 46	
4	W.	0 08	12 28	6 06	18 23	
5	Th.	0 49	13 07	6 46	19 06	
6	F.	1 33	13 51	7 30	19 52	
7	Sa.	2 19	14 38	8 17	20 41	
8	Sa.	3 08	15 30	9 07	21 34	
9	M.	3 59	16 28	10 01	22 30	☾
10	Tu.	4 55	17 27	11 00	23 29	
11	W.	5 55	18 28	.....	12 02	
12	Th.	6 56	19 30	0 31	13 07	
13	F.	7 56	20 31	1 35	14 13	
14	Sa.	8 55	21 31	2 37	15 15	
15	Sa.	9 53	22 27	3 36	16 11	☉
16	Tu.	10 48	23 20	4 31	17 02	
17	W.	11 39	.....	5 22	17 51	
18	Th.	0 11	12 29	6 11	18 39	
19	F.	1 01	13 18	7 01	19 27	
20	Sa.	1 50	14 07	7 51	20 15	
21	Sa.	2 40	14 57	8 42	21 04	
22	S.	3 30	15 48	9 33	21 54	☾
23	M.	4 21	16 41	10 25	22 45	
24	Tu.	5 13	17 36	11 19	23 38	
25	W.	6 06	18 33	.....	12 13	
26	Th.	6 59	19 29	0 32	13 07	
27	F.	7 52	20 21	1 27	14 00	
28	Sa.	8 43	21 09	2 21	14 51	
29	Sa.	9 29	21 53	3 09	15 36	
30	Tu.	10 09	22 33	3 49	16 14	
31	M.	10 47	23 11	4 25	16 50	☉
	Tu.	11 24	23 48	5 01	17 25	

## FEBRUARY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	W.	H. M.	H. M.	H. M.	H. M.	
2	Th.	0 25	12 38	5 38	18 00	
3	F.	1 04	13 19	6 17	18 37	
4	Sa.	1 47	14 06	7 00	19 21	
5	S.	2 36	15 01	7 49	20 12	
6	M.	3 30	16 00	8 42	21 06	
7	Tu.	4 28	17 04	9 39	22 04	☾
8	W.	5 31	18 11	10 40	23 05	
9	Th.	6 36	19 19	11 48	.....	
10	F.	7 42	20 23	0 15	12 57	
11	Sa.	8 46	21 21	1 23	13 58	
12	S.	9 45	22 13	2 25	14 56	
13	M.	10 37	23 02	3 24	15 51	
14	Tu.	11 25	23 49	4 19	16 43	☉
15	W.	.....	12 11	5 10	17 32	
16	Th.	0 35	12 56	5 55	18 19	
17	F.	1 20	13 41	6 38	19 04	
18	Sa.	2 05	14 27	7 22	19 47	
19	S.	2 51	15 15	8 07	20 29	
20	M.	3 39	16 06	8 53	21 12	
21	Tu.	4 29	17 00	9 41	22 00	☾
22	W.	5 22	17 56	10 33	22 54	
23	Th.	6 16	18 53	11 28	23 52	
24	F.	7 10	19 49	.....	12 25	
25	Sa.	8 03	20 40	0 50	13 22	
26	S.	8 53	21 25	1 45	14 14	
27	M.	9 39	22 06	2 33	14 59	
28	Tu.	10 21	22 44	3 15	15 40	☉
				3 55	16 20	

## MARCH.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	W.	H. M.	H. M.	H. M.	H. M.	
2	Th.	10 58	23 19	4 34	16 59	
3	F.	11 34	23 55	5 14	17 38	
4	Sa.	.....	12 11	5 55	18 19	
5	S.	0 33	12 55	6 38	19 03	
6	M.	1 19	13 45	7 25	19 52	
7	Tu.	2 10	14 42	8 18	20 45	
8	W.	3 07	15 43	9 16	21 43	☾
9	Th.	4 09	16 48	10 20	22 48	
10	F.	5 16	17 55	11 29	23 58	
11	Sa.	6 25	19 05	.....	12 40	
12	S.	7 34	20 14	1 13	13 50	
13	M.	8 37	21 13	2 21	14 52	
14	Tu.	9 33	22 03	3 19	15 45	
15	W.	10 23	22 47	4 07	16 31	☉
16	Th.	11 07	23 26	4 52	17 14	
17	F.	11 46	.....	5 35	17 53	
18	Sa.	0 03	12 24	6 15	18 30	
19	S.	0 41	13 03	6 52	19 06	
20	M.	1 22	13 44	7 29	19 45	
21	Tu.	2 06	14 29	8 08	20 28	
22	W.	2 53	15 17	8 51	21 16	☾
23	Th.	3 44	16 13	9 39	22 10	
24	F.	4 40	17 13	10 37	23 08	
25	Sa.	5 38	18 12	11 39	.....	
26	S.	6 36	19 09	0 07	12 39	
27	M.	7 28	20 02	1 04	13 34	
28	Tu.	8 16	20 51	1 55	14 23	
29	W.	9 01	21 35	2 41	15 07	
30	Th.	9 44	22 13	3 25	15 49	
31	F.	10 25	22 49	4 08	16 30	☉
	Tu.	11 06	23 27	4 51	17 11	

## APRIL.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	Sa.	H. M.	H. M.	H. M.	H. M.	
2	S.	11 51	.....	5 35	17 54	
3	M.	0 10	12 39	6 20	18 41	
4	Tu.	1 00	13 30	7 08	19 32	
5	W.	1 56	14 25	8 01	20 29	
6	Th.	2 55	15 26	9 00	21 32	☾
7	F.	3 57	16 33	10 07	22 41	
8	Sa.	5 03	17 44	11 17	23 52	
9	S.	6 11	18 57	.....	12 27	
10	M.	7 20	20 03	1 02	13 35	
11	Tu.	8 23	20 57	2 05	14 35	
12	W.	9 16	21 40	2 58	15 25	
13	Th.	10 01	22 20	3 43	16 07	☉
14	F.	10 42	22 59	4 23	16 47	
15	Sa.	11 20	23 37	5 02	17 25	
16	S.	11 56	.....	5 40	18 01	
17	M.	0 15	12 33	6 17	18 36	
18	Tu.	0 54	13 12	6 54	19 13	
19	W.	1 35	13 55	7 33	19 53	
20	Th.	2 18	14 43	8 17	20 38	
21	F.	3 05	15 39	9 08	21 29	☾
22	Sa.	3 57	16 40	10 02	22 23	
23	S.	4 54	17 39	10 57	23 19	
24	M.	5 52	18 33	11 53	.....	
25	Tu.	6 49	19 24	0 16	12 48	
26	W.	7 41	20 11	1 12	13 39	
27	Th.	8 30	20 55	2 05	14 27	
28	F.	9 17	21 38	2 54	15 14	
29	Sa.	10 02	22 20	3 39	16 00	☉
30	S.	10 46	23 03	4 24	16 45	
		11 31	23 49	5 09	17 31	

The Time used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The Height of High Water at Yarmouth, above the level of Low Water at ordinary Spring Tides, is found by multiplying the height at St. John by 0.55; that is, it is a little more than half the height given for High Water in the St. John tide tables.

## MAY.

Date.	Day.	HIGH WATER.		LOW WATER.				Moon.		
		Morn'g.		After'n.		Morn'g.			After'n.	
		H.	M.	H.	M.	H.	M.		H.	M.
1	M.	.....		12	20	5	57	18	19	
2	T.	0	39	13	13	6	51	19	13	
3	W.	1	36	14	11	7	48	20	15	
4	Th.	2	38	15	15	8	49	21	23	
5	F.	3	45	16	24	9	54	22	35	
6	Sa.	4	54	17	35	11	04	23	45	
7	S.	6	03	18	45	.....	.....	12	13	
8	M.	7	06	19	41	0	49	13	15	
9	Tu.	8	01	20	29	1	47	14	11	
10	W.	8	51	21	11	2	38	15	00	
11	Th.	9	36	21	50	3	24	15	41	
12	F.	10	17	22	27	4	03	16	18	
13	Sa.	10	54	23	03	4	38	16	53	
14	S.	11	29	23	40	5	13	17	27	
15	M.	.....		12	05	5	49	18	02	
16	Tu.	0	19	12	43	6	26	18	39	
17	W.	1	00	13	26	7	04	19	19	
18	Th.	1	43	14	14	7	45	20	06	
19	F.	2	29	15	05	8	31	20	56	
20	Sa.	3	19	15	57	9	21	21	49	
21	S.	4	13	16	50	10	14	22	44	
22	M.	5	10	17	43	11	09	23	42	
23	Tu.	6	07	18	35	.....	.....	12	07	
24	W.	7	02	19	27	0	39	12	59	
25	Th.	7	54	20	19	1	33	13	53	
26	F.	8	46	21	10	2	25	14	46	
27	Sa.	9	37	22	00	3	15	15	38	
28	S.	10	27	22	49	4	05	16	28	
29	M.	11	18	23	38	4	56	17	19	
30	Tu.	.....		12	11	5	49	18	12	
31	W.	0	29	13	07	6	44	19	09	

## JUNE.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.				
		Morn'g.		After'n.						
		H.	M.	H.	M.		H.	M.	H.	M.
1	Th.	1	26	14	07	7	41	20	10	
2	F.	2	26	15	10	8	40	21	13	
3	Sa.	3	27	16	14	9	41	22	17	
4	S.	4	32	17	16	10	45	23	20	
5	M.	5	37	18	15	11	48			
6	Tu.	6	38	19	11	6	19	12	47	
7	W.	7	33	20	02	1	13	13	41	
8	Th.	8	24	20	49	2	04	14	31	
9	F.	9	10	21	31	2	52	15	16	
10	Sa.	9	53	22	10	3	36	15	56	
11	S.	10	33	22	47	4	16	16	32	
12	M.	11	10	23	23	4	52	17	06	
13	Tu.	11	45	23	59	5	27	17	40	
14	W.			12	21	6	02	18	16	
15	Th.	0	36	13	00	6	38	18	55	
16	F.	1	15	13	43	7	16	19	39	
17	Sa.	1	58	14	29	7	58	20	25	
18	S.	2	46	15	19	8	47	21	14	
19	M.	3	38	16	11	9	39	22	07	
20	Tu.	4	32	17	05	10	34	23	03	
21	W.	5	27	18	00	11	30			
22	Th.	6	23	18	56	0	02	12	27	
23	F.	7	20	19	53	1	03	13	25	
24	Sa.	8	19	20	49	2	04	14	23	
25	S.	9	17	21	44	3	02	15	20	
26	M.	10	13	22	36	3	55	16	16	
27	Tu.	11	08	23	28	4	47	17	10	
28	W.			12	02	5	40	18	02	
29	Th.	0	21	12	56	6	33	18	56	
30	F.	1	15	13	51	7	25	19	51	

## JULY.

		H.	M.	H.	M.	H.	M.	H.	M.
1	Sa	2	10	14	47	8	18	20	47
2	S	3	06	15	44	9	12	21	45
3	M.	4	03	16	42	10	08	22	44
4	Tu.	5	01	17	39	11	06	23	43
5	W.	5	58	18	34			12	05
6	Th.	6	54	19	25	0	41	13	04
7	F.	7	48	20	14	1	36	14	09
8	Sa.	8	39	21	00	2	27	14	48
9	S.	9	26	21	43	3	12	15	32
10	M.	10	09	22	23	3	51	16	12
11	Tu.	10	49	23	01	4	28	16	49
12	W.	11	26	23	37	5	04	17	24
13	Th.			12	02	5	39	17	58
14	F.	0	14	12	38	6	15	18	33
15	Sa.	0	53	13	16	6	53	19	11
16	S	1	34	13	58	7	34	19	54
17	M.	2	18	14	46	8	20	20	43
18	Tu.	3	07	15	38	9	11	21	36
19	W.	3	59	16	33	10	05	22	33
20	Th.	4	55	17	30	11	01	23	33
21	F.	5	55	18	28			12	00
22	Sa.	6	58	19	27	0	36	13	02
23	S.	8	02	20	27	1	40	14	05
24	M.	9	02	21	25	2	42	15	05
25	Tu.	9	59	22	20	3	41	16	03
26	W.	10	54	23	13	4	36	16	57
27	Th.	11	47			5	27	17	47
28	F.	0	05	12	39	6	15	18	36
29	Sa.	0	57	13	30	7	03	19	26
30	S.	1	48	14	29	7	52	20	17
31	M.	2	38	15	09	8	42	21	11

## AUGUST.

		H.	M.	H.	M.	H.	M.	H.	M.
1	Tu.	3	28	16	01	9	33	22	07
2	W.	4	21	16	56	10	26	23	04
3	Th.	5	18	17	51	11	23		
4	F.	6	18	18	45	0	02	12	22
5	Sa.	7	16	19	38	0	59	13	20
6	S.	8	10	20	29	1	53	14	16
7	M.	9	01	21	16	2	42	15	05
8	Tu.	9	48	21	57	3	25	15	46
9	W.	10	29	22	34	4	03	16	21
10	Th.	11	06	23	10	4	39	16	55
11	F.	11	41	23	47	5	14	17	30
12	Sa.			12	15	5	49	18	07
13	S.	0	25	12	50	6	25	18	47
14	M.	1	05	13	28	7	03	19	30
15	Tu.	1	48	14	12	7	44	20	17
16	W.	2	38	15	03	8	29	21	08
17	Th.	3	33	15	59	9	22	22	05
18	F.	4	31	17	01	10	24	23	10
19	Sa.	5	34	18	06	11	42		
20	S.	6	40	19	11	0	19	12	52
21	M.	7	47	20	15	1	27	13	55
22	Tu.	8	50	21	14	2	30	14	55
23	W.	9	47	22	07	3	29	15	52
24	Th.	10	33	22	57	4	22	16	45
25	F.	11	26	23	44	5	10	17	33
26	Sa.			12	12	5	54	18	18
27	S.	0	29	12	57	6	38	19	02
28	M.	1	14	13	42	7	22	19	47
29	Tu.	2	01	14	28	8	07	20	34
30	W.	2	53	15	18	8	53	21	24
31	Th.	3	48	16	12	9	41	22	18

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT of High Water at Yarmouth, above the level of Low Water at ordinary Spring Tides, is found by multiplying the height at St. John by 0.55; that is, it is a little more than half the height given for High Water in the St. John tide tables.



## SEPTEMBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.				
		Morn'g.		After'n.						
		H.	M.	H.	M.		H.	M.	H.	M.
1	F.	4	45	17	09	10	41	23	14	
2	Sa.	5	43	18	07	11	40			
3	§	6	41	19	03	0	12	12	40	
4	M.	7	38	19	56	1	11	13	39	
5	Tu.	8	31	20	45	2	07	14	32	
6	W.	9	16	21	27	2	57	15	17	
7	Th.	9	55	22	06	3	37	15	54	
8	F.	10	33	22	42	4	13	16	29	○
9	Sa.	11	07	23	17	4	47	17	04	
10	§	11	40	23	53	5	21	17	40	
11	M.	.....	.....	12	15	5	57	18	19	
12	Tu.	0	34	12	57	6	36	19	02	
13	W.	1	23	13	46	7	22	19	53	
14	Th.	2	16	14	40	8	14	20	48	
15	F.	3	12	15	39	9	11	21	47	☾
16	Sa.	4	12	16	42	10	13	22	52	
17	§	5	19	17	50	11	23			
18	M.	6	29	18	59	0	01	12	34	
19	Tu.	7	36	20	02	1	10	13	44	
20	W.	8	37	21	00	2	18	14	48	
21	Th.	9	32	21	53	3	16	15	42	
22	F.	10	21	22	40	4	05	16	29	☽
23	Sa.	11	05	23	24	4	49	17	13	
24	§	11	48	.....	.....	5	31	17	54	
25	M.	0	07	12	30	6	12	18	35	
26	Tu.	0	51	13	12	6	53	19	17	
27	W.	1	35	13	56	7	35	20	00	
28	Th.	2	20	14	44	8	18	20	45	
29	F.	3	09	15	36	9	06	21	34	
30	Sa.	4	02	16	30	9	59	22	26	☽

## OCTOBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.				
		Morn'g.		After'n.						
		H.	M.	H.	M.		H.	M.	H.	M.
1	§	4	59	17	25	10	58	23	24	
2	M.	5	59	18	21	11	58	.....		
3	Tu.	6	58	19	15	0	25	12	57	
4	W.	7	53	20	05	1	23	13	50	
5	Th.	8	41	20	51	2	15	14	37	
6	F.	9	23	21	33	2	58	15	19	
7	Sa.	10	01	22	13	3	37	15	59	
8	§	10	37	22	52	4	15	16	38	○
9	M.	11	14	23	32	4	53	17	18	
10	Tu.	11	54	.....		5	32	18	01	
11	W.	0	14	12	38	6	14	18	47	
12	Th.	0	59	13	27	7	01	19	36	
13	F.	1	49	14	19	7	53	20	32	
14	Sa.	2	47	15	17	8	54	21	35	☾
15	§	3	53	16	26	10	02	22	43	
16	M.	5	05	17	37	11	13	23	53	
17	Tu.	6	18	18	49	.....		12	25	
18	W.	7	27	19	53	1	02	13	35	
19	Th.	8	26	20	48	2	05	14	36	
20	F.	9	15	21	35	2	58	15	25	
21	Sa.	9	57	22	18	3	43	16	09	
22	§	10	38	22	59	4	24	16	50	☾
23	M.	11	19	23	41	5	05	17	29	
24	Tu.	11	59	.....		5	45	18	07	
25	W.	0	23	12	40	6	24	18	45	
26	Th.	1	06	13	23	7	04	19	24	
27	F.	1	50	14	08	7	45	20	05	
28	Sa.	2	36	14	56	8	29	20	52	
29	§	3	27	15	47	9	18	21	47	
30	M.	4	24	16	43	10	12	22	44	
31	Tu.	5	21	17	38	11	08	23	42	☾

## NOVEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	W.	6	17	18	32			12	05
2	Th.	7	08	19	25	0	38	13	00
3	F.	7	56	20	15	1	27	13	51
4	Sa.	8	38	21	01	2	11	14	37
5	§.	9	18	21	42	2	54	15	22
6	M.	9	59	22	23	3	38	16	06
7	Tu.	10	42	23	07	4	23	16	51
8	W.	11	27	23	55	5	10	17	37
9	Th.			12	15	5	59	18	25
10	F.	0	47	12	09	6	51	19	18
11	Sa.	1	44	14	07	7	47	20	17
12	§.	2	45	15	10	8	47	21	19
13	M.	3	50	16	18	9	52	22	24
14	Tu.	4	59	17	29	11	03	23	33
15	W.	6	07	18	36			12	12
16	Th.	7	08	19	35	0	39	13	14
17	F.	8	01	20	26	1	34	14	11
18	Sa.	8	49	21	14	2	30	15	01
19	§.	9	32	21	59	3	19	15	46
20	M.	10	13	22	41	4	02	16	27
21	Tu.	10	53	23	21	4	42	17	06
22	W.	11	32			5	19	17	44
23	Th.	0	01	12	12	5	55	18	21
24	F.	0	40	12	54	6	31	18	58
25	Sa.	1	20	13	38	7	09	19	37
26	§.	2	04	14	24	7	52	20	20
27	M.	2	51	15	12	8	41	21	09
28	Tu.	3	42	16	03	9	35	22	01
29	W.	4	35	16	56	10	30	22	55
30	Th.	5	29	17	50	11	25	23	49

## DECEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	F.	6	22	18	44			12	19
2	Sa.	7	12	19	36	0	42	13	12
3	§.	8	01	20	26	1	33	14	05
4	M.	8	49	21	15	2	23	14	57
5	Tu.	9	38	22	03	3	14	15	48
6	W.	10	26	22	52	4	05	16	33
7	Th.	11	15	23	43	4	55	17	27
8	F.	.....		12	06	5	46	18	17
9	Sa.	0	36	13	00	6	38	19	08
10	§.	1	33	13	58	7	33	20	03
11	M.	2	34	14	58	8	33	21	03
12	Tu.	3	37	16	01	9	38	22	08
13	W.	4	41	17	04	10	45	23	13
14	Th.	5	42	18	05	11	49		
15	F.	6	39	19	03	0	14	12	48
16	Sa.	7	32	19	53	1	12	13	45
17	§.	8	23	20	49	2	05	14	36
18	M.	9	10	21	37	2	54	15	21
19	Tu.	9	53	22	19	3	35	16	02
20	W.	10	32	22	58	4	15	16	40
21	Th.	11	10	23	36	4	54	17	17
22	F.	11	47			5	32	17	54
23	Sa.	0	13	12	24	6	10	18	32
24	§.	0	51	13	03	6	49	19	11
25	M.	1	30	13	45	7	29	19	51
26	Tu.	2	12	14	30	8	10	20	32
27	W.	2	57	15	17	8	54	21	16
28	Th.	3	46	16	07	9	45	22	05
29	F.	4	39	17	00	10	40	22	59
30	Sa.	5	34	17	57	11	37	23	58
31	§	6	30	18	56	.....		12	35

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The HEIGHT of High Water at Yarmouth, above the level of Low Water at ordinary Spring Tides, is found by multiplying the height at St. John by 0.55; that is, it is a little more than half the height given for High water in the St. John tide tables.

## JANUARY.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	S.	12	14	22	52	5	16	17	30	
2	M.	12	56	23	30	6	00	18	10	
3	Tu.	.....	.....	13	34	6	40	18	51	
4	W.	0	10	14	10	7	18	19	33	
5	Th.	0	55	14	44	7	55	20	16	
6	F.	1	46	15	16	8	33	21	01	
7	Sa.	2	43	15	48	9	14	21	50	
8	S.	3	49	16	23	10	00	22	44	D
9	M.	5	07	17	04	10	52	23	44	
10	Tu.	6	24	17	54	11	54	.....	.....	
11	W.	7	38	18	49	0	48	13	01	
12	Th.	8	47	19	47	1	54	14	10	
13	F.	9	52	20	46	2	58	15	15	
14	Sa.	10	52	21	46	3	59	16	14	C
15	S.	11	46	22	44	4	55	17	06	
16	M.	12	34	23	40	5	46	17	56	
17	Tu.	.....	.....	13	18	6	33	18	45	
18	W.	0	34	13	58	7	16	19	32	
19	Th.	1	26	14	33	7	57	20	18	
20	F.	2	17	15	06	8	37	21	03	
21	Sa.	3	09	15	39	9	17	21	49	
22	S.	4	04	16	13	9	58	22	38	C
23	M.	5	02	16	49	10	41	23	31	
24	Tu.	5	04	17	28	11	28	.....	.....	
25	W.	7	10	18	14	0	29	12	20	
26	Th.	8	16	19	06	1	30	13	21	
27	F.	9	19	20	01	2	29	14	24	
28	Sa.	10	18	20	56	3	22	15	26	
29	S.	11	10	21	48	4	10	16	20	
30	M.	11	52	22	37	4	55	17	08	⊕
31	Tu.	12	28	23	26	5	38	17	51	

## FEBRUARY.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	W.			13	01	6	19	18	32	
2	Th.	0	14	13	31	6	58	19	12	
3	F.	1	02	14	00	7	35	19	52	
4	Sa.	1	51	14	28	8	11	20	33	
5	S.	2	42	14	57	8	48	21	16	
6	M.	3	39	15	31	9	29	22	09	
7	Tu.	4	48	16	14	10	20	23	11	
8	W.	6	04	17	06	11	22			
9	Th.	7	21	18	10	0	20	12	36	
10	F.	8	36	19	24	1	32	13	49	
11	Sa.	9	44	20	35	2	40	14	59	
12	S.	10	42	21	40	3	43	15	58	
13	M.	11	30	22	40	4	40	16	51	
14	Tu.	12	11	23	37	5	29	17	39	
15	W.			12	44	6	12	18	23	
16	Th.	0	27	13	14	6	50	19	04	
17	F.	1	13	13	43	7	26	19	44	
18	Sa.	1	57	14	11	8	01	20	23	
19	S.	2	41	14	39	8	36	21	04	
20	M.	3	27	15	08	9	12	21	48	
21	Tu.	4	19	15	39	9	50	22	39	
22	W.	5	24	16	16	10	34	23	37	
23	Th.	6	38	17	05	11	30			
24	F.	7	49	18	08	0	40	12	45	
25	Sa.	8	54	19	19	1	45	13	48	
26	S.	9	50	20	32	2	46	15	00	
27	M.	10	36	21	36	3	40	15	57	
28	Tu.	11	13	22	30	4	28	16	42	

## MARCH.

		H.	M.	H.	M.	H.	M.	H.	M.
1	W.	11	45	23	19	5	11	17	24
2	Th.			12	15	6	52	18	05
3	F.	0	06	12	43	6	31	18	45
4	Sa.	0	52	13	10	7	09	19	26
5	S.	1	39	13	38	7	46	20	09
6	M.	2	32	14	10	8	25	20	56
7	Tu.	3	34	14	49	9	10	21	50
8	W.	4	44	15	39	10	03	22	51
9	Th.	6	00	16	45	11	08		
10	F.	7	18	18	02	0	08	12	22
11	Sa.	8	30	19	22	1	20	13	38
12	S.	9	31	20	37	2	30	14	46
13	M.	10	20	21	44	3	33	15	45
14	Tu.	11	02	22	43	4	24	16	36
15	W.	11	36	23	33	5	08	17	21
16	Th.			12	05	5	48	18	02
17	F.	0	16	12	31	6	25	18	41
18	Sa.	0	57	12	55	6	59	19	19
19	S.	1	38	13	13	7	32	19	56
20	M.	2	20	13	42	8	04	20	32
21	Tu.	3	04	14	06	8	36	21	09
22	W.	3	54	14	34	9	10	21	50
23	Th.	4	56	15	09	9	49	22	43
24	F.	6	10	15	58	10	39	23	48
25	Sa.	7	19	17	17	11	59		
26	S.	8	18	18	54	1	00	13	27
27	M.	9	06	20	14	2	08	14	36
28	Tu.	9	44	21	18	3	07	15	28
29	W.	10	19	22	15	3	54	16	14
30	Th.	10	52	23	07	4	36	16	56
31	F.	11	23	23	56	5	17	17	37

## APRIL.

		H.	M.	H.	M.	H.	M.	H.	M.
1	Sa.	11	53			5	58	18	18
2	S.	0	44	12	24	6	39	19	01
3	M.	1	33	12	58	7	21	19	47
4	Tu.	2	24	13	36	8	06	20	38
5	W.	3	23	14	21	8	56	21	36
6	Th.	4	32	15	18	9	53	22	39
7	F.	5	52	16	34	11	00	23	48
8	Sa.	7	08	18	07			12	18
9	S.	8	09	19	26	1	03	13	31
10	M.	9	00	20	37	2	11	14	34
11	Tu.	9	40	21	40	3	10	15	29
12	W.	10	14	22	32	4	00	16	17
13	Th.	10	46	23	18	4	42	17	00
14	F.	11	16			5	21	17	39
15	Sa.	0	01	11	44	5	58	18	16
16	S.	0	42	12	11	6	32	18	51
17	M.	1	22	12	36	7	03	19	26
18	Tu.	2	03	13	00	7	33	20	02
19	W.	2	46	13	23	8	03	20	39
20	Th.	3	35	13	48	8	36	21	18
21	F.	4	33	14	22	9	18	22	04
22	Sa.	5	38	15	16	10	20	23	05
23	S.	6	42	16	47	11	44		
24	M.	7	33	18	30	0	20	13	00
25	Tu.	8	13	19	56	1	28	13	59
26	W.	8	50	21	04	2	24	14	51
27	Th.	9	25	22	01	3	14	15	40
28	F.	10	00	22	52	4	02	16	28
29	Sa.	10	36	23	41	4	48	17	15
30	S.	11	14			5	33	18	01

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The nature of the TIDAL STREAMS in Northumberland strait and the Gut of Canso is explained on pages 9 and 10.

MAY.										JUNE.											
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.	Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.					Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.	H.	M.	
1	M.	0	29	11	54	6	18	18	47		1	Th.	2	16	13	12	7	41	20	16	
2	Tu.	1	19	12	36	7	04	19	34		2	F.	3	11	14	11	8	34	21	09	
3	W.	2	16	13	21	7	52	20	23		3	Sa.	4	05	15	16	9	33	22	03	
4	Th.	3	18	14	12	8	43	21	18		4	S.	4	57	16	26	10	34	22	59	
5	F.	4	24	15	16	9	41	22	21	☾	5	M.	5	46	17	40	11	36	23	57	
6	Sa.	5	31	16	34	10	50	23	32		6	Tu.	6	32	18	53	.....	.....	12	38	
7	S.	6	34	17	58	.....	.....	12	01		7	W.	7	16	20	00	0	55	13	37	
8	M.	7	28	19	17	0	39	13	10		8	Th.	7	56	20	59	1	50	14	29	
9	Tu.	8	13	20	27	1	41	14	09		9	F.	8	33	21	52	2	39	15	19	
10	W.	8	51	21	26	2	36	15	01		10	Sa.	9	09	22	41	3	25	16	07	
11	Th.	9	27	22	16	3	23	15	48		11	S.	9	46	23	28	4	10	16	51	☉
12	F.	10	01	23	03	4	07	16	32		12	M.	10	22	.....	.....	4	54	17	32	
13	Sa.	10	33	23	46	4	48	17	13	☉	13	Tu.	0	13	10	57	5	36	18	09	
14	S.	11	03	.....	.....	5	25	17	52		14	W.	0	56	11	31	6	15	18	45	
15	M.	0	28	11	31	6	00	18	29		15	Th.	1	37	12	05	6	53	19	22	
16	Tu.	1	09	11	58	6	34	19	05		16	F.	2	17	12	40	7	31	19	59	
17	W.	1	51	12	25	7	09	19	40		17	Sa.	2	57	13	19	8	12	20	37	
18	Th.	2	36	12	53	7	47	20	16		18	S.	3	36	14	10	8	57	21	17	
19	F.	3	24	13	24	8	29	20	54		19	M.	4	14	15	14	9	49	22	01	☾
20	Sa.	4	14	14	05	9	18	21	36		20	Tu.	4	52	16	34	10	46	22	53	
21	S.	5	04	15	08	10	16	22	29	☉	21	W.	5	30	17	58	11	46	23	52	
22	M.	5	52	16	40	11	18	23	30		22	Th.	6	10	19	14	.....	.....	12	47	
23	Tu.	6	35	18	16	.....	.....	12	22		23	F.	6	54	20	24	0	55	13	47	
24	W.	7	16	19	34	0	33	13	23		24	Sa.	7	43	21	28	1	56	14	46	
25	Th.	7	56	20	43	1	37	14	20		25	S.	8	34	22	29	2	56	15	44	
26	F.	8	35	21	43	2	38	15	13		26	M.	9	26	23	26	3	54	16	39	☉
27	Sa.	9	15	22	39	3	32	16	04	☾	27	Tu.	10	20	.....	.....	4	50	17	32	
28	S.	9	56	23	34	4	22	16	54		28	W.	0	20	11	15	5	43	18	22	
29	M.	10	40	.....	.....	5	11	17	43		29	Th.	1	10	12	11	6	34	19	11	
30	Tu.	0	28	11	27	6	00	18	33		30	F.	1	58	13	08	7	24	19	59	
31	W.	1	22	12	18	6	50	19	24												
JULY.										AUGUST.											
Date.	Day.	H.	M.	H.	M.	H.	M.	H.	M.	Moon.	Date.	Day.	H.	M.	H.	M.	H.	M.	H.	M.	Moon.
1	Sa.	2	44	14	06	8	15	20	46		1	Tu.	3	15	15	44	9	31	21	42	☾
2	S.	3	28	15	05	9	07	21	34		2	W.	3	49	16	40	10	19	22	24	
3	M.	4	11	16	06	10	01	22	23	☉	3	Th.	4	26	17	43	11	10	23	10	
4	Tu.	4	53	17	11	10	58	23	13		4	F.	5	07	18	52	.....	.....	12	07	
5	W.	5	34	18	19	11	57	.....	.....		5	Sa.	5	54	20	00	0	04	13	07	
6	Th.	6	14	19	25	0	04	12	56		6	S.	6	45	21	04	1	04	14	07	
7	F.	6	55	20	27	0	56	13	52		7	M.	7	41	22	02	2	07	15	04	
8	Sa.	7	37	21	26	1	49	14	44		8	Tu.	8	39	22	52	3	08	15	56	
9	S.	8	21	22	22	2	42	15	33		9	W.	9	38	23	35	4	05	16	44	☉
10	M.	9	06	23	14	3	34	16	20		10	Th.	10	33	.....	.....	4	55	17	26	
11	Tu.	9	53	.....	.....	4	25	17	05	☉	11	F.	0	12	11	21	5	38	18	01	
12	W.	0	03	10	41	5	14	17	48		12	Sa.	0	44	12	04	6	17	18	40	
13	Th.	0	46	11	27	6	00	18	28		13	S.	1	13	12	46	6	55	19	15	
14	F.	1	21	12	09	6	42	19	05		14	M.	1	39	13	29	7	32	19	49	
15	Sa.	1	54	12	50	7	22	19	41		15	Tu.	2	03	14	14	8	10	20	24	
16	S.	2	26	13	32	8	01	20	17		16	W.	2	27	15	08	8	51	21	03	
17	M.	2	57	14	18	8	39	20	54		17	Th.	2	57	16	15	9	40	21	50	☾
18	Tu.	3	27	15	12	9	18	21	33		18	F.	3	38	17	30	10	38	22	46	
19	W.	3	56	16	22	10	04	22	17	☉	19	Sa.	4	27	18	48	11	45	23	52	
20	Th.	4	27	17	45	11	00	23	12		20	S.	5	33	20	04	.....	.....	12	56	
21	F.	5	05	19	03	.....	.....	12	08		21	M.	6	52	21	14	1	06	14	08	
22	Sa.	6	00	20	16	0	16	13	18		22	Tu.	8	07	22	13	2	22	15	15	
23	S.	7	04	21	20	1	26	14	27		23	W.	9	16	23	01	3	30	16	15	
24	M.	8	10	22	21	2	34	15	30		24	Th.	10	18	23	44	4	28	17	07	☉
25	Tu.	9	15	23	18	3	40	16	28	☾	25	F.	11	16	.....	.....	5	19	17	54	
26	W.	10	16	.....	.....	4	38	17	20		26	Sa.	0	22	12	10	6	04	18	36	
27	Th.	0	09	11	15	5	30	18	09		27	S.	0	56	12	57	6	47	19	14	
28	F.	0	54	12	10	6	20	18	56		28	M.	1	25	13	42	7	29	19	50	
29	Sa.	1	34	13	04	7	09	19	39		29	Tu.	1	53	14	26	8	10	20	25	
30	S.	2	09	13	57	7	57	20	21		30	W.	2	22	15	12	8	52	21	01	
31	M.	2	42	14	50	8	44	21	02		31	Th.	2	53	16	06	9	35	21	38	☉

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.  
The nature of the TIDAL STREAMS in Northumberland strait and the Gut of Canso is explained on pages 9 and 10.



## SEPTEMBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	F.	3 27	17 08	10 22	22 18	
2	Sa.	4 05	18 17	11 18	23 10	
3	S.	4 51	19 30		12 21	
4	M.	5 54	20 38	0 20	13 27	
5	Tu.	7 09	21 34	1 36	14 30	
6	W.	8 21	22 19	2 44	15 25	
7	Th.	9 22	22 56	3 42	16 14	
8	F.	10 17	23 28	4 30	16 58	
9	Sa.	11 08	23 57	5 12	17 37	
10	S.	11 56		5 51	18 13	
11	M.	0 25	12 42	6 28	18 48	
12	Tu.	0 52	13 27	7 04	19 23	
13	W.	1 18	14 13	7 41	19 59	
14	Th.	1 46	15 04	8 22	20 50	
15	F.	2 20	16 08	9 13	21 29	
16	Sa.	3 03	17 22	10 16	22 28	
17	S.	4 00	18 39	11 28	23 44	
18	M.	5 20	19 54		12 45	
19	Tu.	6 50	20 58	1 06	13 56	
20	W.	8 16	21 47	2 17	15 00	
21	Th.	9 21	22 29	3 18	15 58	
22	F.	10 20	23 06	4 12	16 46	
23	Sa.	11 10	23 39	4 59	17 27	
24	S.	11 56		5 40	18 05	
25	M.	0 09	12 40	6 20	18 42	
26	Tu.	0 36	13 23	6 59	19 17	
27	W.	1 02	14 06	7 37	19 50	
28	Th.	1 27	14 50	8 15	20 22	
29	F.	1 52	15 38	8 55	20 56	
30	Sa.	2 19	16 39	9 38	21 36	

## OCTOBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
1	S.	2 56	17 48	10 28	22 30	
2	M.	3 46	19 00	11 31	23 46	
3	Tu.	5 05	20 00		12 12	
4	W.	6 40	20 48	1 10	13 50	
5	Th.	8 00	21 26	2 16	14 47	
6	F.	9 04	22 00	3 09	15 36	
7	Sa.	9 58	22 32	3 54	16 19	
8	S.	10 47	23 03	4 36	17 00	
9	M.	11 35	23 33	5 17	17 39	
10	Tu.		12 22	5 57	18 18	
11	W.	0 04	13 10	6 37	18 58	
12	Th.	0 37	14 03	7 19	19 40	
13	F.	1 14	15 01	8 07	20 25	
14	Sa.	1 56	16 04	9 06	21 16	
15	S.	2 46	17 14	10 09	22 22	
16	M.	3 50	18 27	11 15	23 13	
17	Tu.	5 21	19 33		12 22	
18	W.	6 50	20 26	0 56	13 30	
19	Th.	8 11	21 10	2 01	14 36	
20	F.	9 19	21 50	3 00	15 35	
21	Sa.	10 12	22 25	3 51	16 23	
22	S.	11 00	22 56	4 36	17 02	
23	M.	11 44	23 25	5 17	17 38	
24	Tu.	12 27	23 53	5 56	18 13	
25	W.		13 09	6 34	18 47	
26	Th.	0 20	13 51	7 11	19 22	
27	F.	0 46	14 35	7 48	19 58	
28	Sa.	1 13	15 22	8 26	20 37	
29	S.	1 42	16 18	9 05	21 22	
30	M.	2 16	17 17	9 50	22 16	
31	Tu.	3 05	18 16	10 50	23 24	

## NOVEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	W.	4 32	19 08	11 58					
2	Th.	6 16	19 51	0 34	13 01				
3	F.	7 38	20 28	1 38	13 58				
4	Sa.	8 43	21 03	2 31	14 49				
5	S.	9 38	21 37	3 19	15 37				
6	M.	10 28	22 11	4 05	16 23				
7	Tu.	11 17	22 47	4 50	17 08				
8	W.	12 05	23 26	5 35	17 52				
9	Th.		12 56	6 21	18 37				
10	F.	0 08	13 53	7 09	19 24				
11	Sa.	0 53	14 54	7 59	20 14				
12	S.	1 44	15 56	8 53	21 13				
13	M.	2 46	16 58	9 52	22 20				
14	Tu.	4 05	17 57	10 56	23 28				
15	W.	5 26	18 51		12 04				
16	Th.	6 46	19 40	0 34	13 07				
17	F.	7 58	20 22	1 35	14 05				
18	Sa.	9 00	21 00	2 33	14 56				
19	S.	9 51	21 36	3 24	15 43				
20	M.	10 41	22 10	4 11	16 27				
21	Tu.	11 30	22 43	4 54	17 08				
22	W.	12 16	23 15	5 35	17 47				
23	Th.	12 58	23 46	6 14	18 25				
24	F.		13 39	6 51	19 02				
25	Sa.	0 16	14 21	7 27	19 39				
26	S.	0 47	15 04	8 02	20 20				
27	M.	1 20	15 49	8 38	21 06				
28	Tu.	1 58	16 35	9 18	21 57				
29	W.	2 54	17 20	10 06	22 54				
30	Th.	4 18	18 03	11 04	23 54				

## DECEMBER.

		H.	M.	H.	M.	H.	M.	H.	M.
1	F.	5 50	18 42						
2	Sa.	7 12	19 20	0 55	13 05				
3	S.	8 16	20 00	1 52	14 03				
4	M.	9 14	20 42	2 44	14 56				
5	Tu.	10 10	21 26	3 35	15 48				
6	W.	11 05	22 13	4 25	16 39				
7	Th.	11 58	23 01	5 16	17 29				
8	F.	12 50	23 50	6 06	18 20				
9	Sa.		13 42	6 55	19 11				
10	S.	0 41	14 33	7 45	20 04				
11	M.	1 36	15 24	8 37	21 00				
12	Tu.	2 44	16 16	9 32	21 59				
13	W.	4 00	17 08	10 29	23 01				
14	Th.	5 16	17 58	11 27					
15	F.	6 27	18 46	0 03	12 25				
16	Sa.	7 33	19 31	1 03	13 21				
17	S.	8 34	20 12	2 01	14 14				
18	M.	9 33	20 52	2 54	15 04				
19	Tu.	10 28	21 31	3 44	15 32				
20	W.	11 18	22 09	4 32	16 38				
21	Th.	12 04	22 46	5 16	17 22				
22	F.	12 47	23 23	5 56	18 03				
23	Sa.		13 28	6 34	18 43				
24	S.	0 01	14 07	7 10	19 22				
25	M.	0 40	14 42	7 45	20 01				
26	Tu.	1 21	15 16	8 20	20 41				
27	W.	2 03	15 49	8 56	21 24				
28	Th.	3 05	16 21	9 35	22 13				
29	F.	4 10	16 55	10 20	23 08				
30	Sa.	5 22	17 33	11 12					
31	S.	6 38	18 16	0 06	12 10				

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

The nature of the TIDAL STREAMS in Northumberland strait and the Gut of Canso is explained on page 9 and

JANUARY.												FEBRUARY.											
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.	Date.	Day.	HIGH WATER.				LOW WATER.				Moon.		
		Morn'g.		After'n.		Morn'g.		After'n.					Morn'g.		After'n.		Morn'g.		After'n.				
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.	H.	M.			
1	S.	11	31	22	10	4	29	16	12		1	W.	12	17	23	34	5	34	17	19			
2	M.	12	04	22	52	5	07	16	50		2	Th.			12	51	6	08	18	03			
3	Tu.	12	39	23	37	5	46	17	33		3	F.	0	27	13	26	6	43	18	52			
4	W.			13	19	6	25	18	19		4	Sa.	1	20	14	03	7	20	19	37			
5	Th.	0	29	14	01	7	05	19	09		5	S.	2	15	14	43	8	03	20	27			
6	F.	1	26	14	45	7	49	20	03		6	M.	3	17	15	28	8	54	21	23			
7	Sa.	2	25	15	30	8	37	20	55		7	Tu.	4	31	16	17	9	57	22	41			
8	M.	3	26	16	16	9	31	21	58		8	W.	5	55	17	10	11	00					
9	Th.	4	35	17	05	10	31	23	09		9	Th.	7	17	18	14	0	03	12	10			
10	Tu.	6	01	17	55	11	37				10	F.	8	39	19	20	1	22	13	19			
11	W.	7	23	18	44	0	23	12	38		11	Sa.	9	37	20	23	2	26	14	16			
12	Th.	8	34	19	36	1	31	13	35		12	S.	10	20	21	19	3	21	15	06			
13	F.	9	32	20	26	2	29	14	28		13	M.	10	58	22	12	4	10	15	53			
14	Sa.	10	24	21	16	3	23	15	16		14	Tu.	11	33	23	03	4	53	16	39			
15	S.	11	14	22	07	4	13	16	00		15	W.	12	07	23	53	5	31	17	22			
16	M.	11	59	23	00	5	01	16	43		16	Th.			12	40	6	07	18	06			
17	Tu.	12	42	23	55	5	48	17	31		17	F.	0	44	13	13	6	42	18	52			
18	W.			13	24	6	33	18	23		18	Sa.	1	31	13	45	7	18	19	33			
19	Th.	0	52	14	05	7	16	19	18		19	S.	2	15	14	17	7	55	20	19			
20	F.	1	52	14	45	8	00	20	15		20	M.	3	06	14	50	8	34	21	09			
21	Sa.	2	49	15	24	8	45	21	05		21	Tu.	4	09	15	24	9	17	22	06			
22	S.	3	48	16	04	9	31	22	00		22	W.	5	24	16	05	10	04	23	18			
23	M.	4	57	16	46	10	19	23	05		23	Th.	7	01	17	07	11	15					
24	Tu.	6	21	17	31	11	15				24	F.	8	11	18	16	0	43	12	36			
25	W.	7	33	18	17	0	16	12	12		25	Sa.	9	01	19	21	1	51	13	40			
26	Th.	8	37	19	06	1	18	13	10		26	S.	9	41	20	19	2	41	14	28			
27	F.	9	27	19	53	2	13	14	00		27	M.	10	13	21	12	3	24	15	06			
28	Sa.	10	09	20	38	3	02	14	45		28	Tu.	10	41	21	59	4	03	15	41			
29	S.	10	41	21	20	3	45	15	28														
30	M.	11	12	22	03	4	23	16	04														
31	Tu.	11	44	22	47	4	59	16	40														

MARCH.												APRIL.														
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.	Date.	Day.	HIGH WATER.				LOW WATER.				Moon.					
		Morn'g.		After'n.		Morn'g.		After'n.						Morn'g.		After'n.		Morn'g.		After'n.						
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.	H.	M.						
1	W.	11	08	23	00	4	38	16	17		1	Sa.	11	33			5	14	17	25						
2	Th.	11	35	23	41	5	10	16	57		2	S.	0	11	12	12	5	53	18	09						
3	F.			12	04	5	41	17	44		3	M.	1	06	12	48	6	35	18	56						
4	Sa.	0	24	12	38	6	14	18	25		4	Tu.	2	07	13	20	7	12	19	49						
5	S.	1	10	13	16	6	53	19	09		5	W.	3	17	14	00	7	59	20	55						
6	M.	2	02	13	54	7	37	19	59		6	Th.	4	41	14	56	9	02	22	15						
7	Tu.	3	04	14	33	8	17	21	00		7	F.	6	04	16	22	10	26	23	45						
8	W.	4	17	15	19	9	06	22	21		8	Sa.	7	13	18	01			12	00						
9	Th.	6	19	16	24	10	26	23	57		9	S.	8	09	19	20	1	05	13	09						
10	F.	7	22	17	48	11	48				10	M.	8	53	20	21	2	11	14	04						
11	Sa.	8	20	19	13	1	21	13	04		11	Tu.	9	25	21	17	2	52	14	49						
12	S.	9	13	20	24	2	22	14	06		12	W.	9	54	22	15	3	30	15	32						
13	M.	9	54	21	21	3	11	14	59		13	Th.	10	22	22	56	4	05	16	14						
14	Tu.	10	26	22	12	3	55	15	44		14	F.	10	49	23	35	4	36	16	46						
15	W.	10	56	23	02	4	32	16	28		15	Sa.	11	15			5	06	17	18						
16	Th.	11	25	23	45	5	07	17	11		16	S.	0	13	11	38	5	36	17	52						
17	F.	11	53			5	41	17	44		17	M.	0	50	11	57	5	58	18	28						
18	Sa.	0	22	12	21	6	13	18	18		18	T.	1	29	12	19	6	23	19	06						
19	S.	1	00	12	49	6	43	18	55		19	W.	2	15	12	45	6	53	19	49						
20	M.	1	46	13	14	7	14	19	35		20	Th.	3	10	13	18	7	30	20	39						
21	Tu.	2	37	13	36	7	39	20	20		21	F.	4	12	14	09	8	23	21	42						
22	W.	3	33	14	05	8	09	21	13		22	Sa.	5	31	15	28	9	42	23	03						
23	Th.	4	50	14	51	8	52	22	22		23	S.	6	34	17	13	11	17								
24	F.	6	26	16	09	10	20	23	53		24	M.	7	23	18	49	0	23	12	38						
25	Sa.	7	39	17	43	11	59				25	Tu.	8	04	19	58	1	24	13	42						
26	S.	8	21	19	04	1	16	13	07		26	W.	8	41	20	56	2	13	14	32						
27	M.	8	35	20	11	2	11	14	02		27	Th.	9	16	21	47	2	55	15	10						
28	Tu.	9	27	21	07	2	52	14	45		28	F.	9	51	22	37	3	35	15	47						
29	W.	9	57	21	59	3	30	15	27		29	Sa.	10	25	23	26	4	14	16	27						
30	Th.	10	26	22	43	4	05	16	09		30	S.	11	04			4	53	17	12						
31	F.	10	57	23	24	4	39	16	45																	

The Time used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the leading ports on Northumberland strait are given on page 9.

## MAY.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	M.	0	15	11	30	5	24	18	03	
2	Tu.	1	05	12	07	6	00	18	37	
3	W.	2	01	12	52	6	47	19	55	
4	Th.	3	08	13	47	7	43	20	58	
5	F.	4	23	14	56	8	52	22	08	
6	Sa.	5	37	16	24	10	15	23	27	
7	S.	6	43	18	01	11	46			
8	M.	7	33	19	28	0	43	13	01	
9	Tu.	8	11	20	34	1	36	13	52	
10	W.	8	44	21	27	2	19	14	39	
11	Th.	9	15	22	09	2	58	15	15	
12	F.	9	45	22	46	3	34	15	50	
13	Sa.	10	14	23	21	4	06	16	25	
14	S.	10	38	23	57	4	37	17	00	
15	M.	10	56			4	59	17	35	
16	Tu.	0	35	11	16	5	23	18	11	
17	W.	1	15	11	40	5	51	18	48	
18	Th.	1	58	12	13	6	24	19	27	
19	F.	2	46	12	57	7	06	20	11	
20	Sa.	3	42	13	56	8	00	21	05	
21	S.	4	43	15	15	9	12	22	17	
22	M.	5	39	16	51	10	35	23	38	
23	Tu.	6	26	18	23	11	58			
24	W.	7	09	19	33	0	33	13	05	
25	Th.	7	51	20	37	1	27	13	56	
26	F.	8	36	21	33	2	16	14	45	
27	Sa.	9	08	22	22	3	03	15	32	
28	S.	9	39	23	12	3	39	16	17	
29	M.	10	13			4	16	17	02	
30	Tu.	0	03	10	51	4	56	17	49	
31	W.	0	55	11	36	5	40	18	40	

## JUNE.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	Th.	1	51	12	31	6	32	19	37	
2	F.	2	50	13	36	7	29	20	38	
3	Sa.	3	53	14	56	8	40	21	44	
4	S.	4	55	16	25	10	00	22	54	
5	M.	5	53	17	57	11	20			
6	Tu.	6	41	19	13	0	02	12	30	
7	W.	7	20	20	13	0	57	13	23	
8	Th.	7	54	21	05	1	41	14	10	
9	F.	8	27	21	50	2	23	14	53	
10	Sa.	8	56	22	30	3	02	15	33	
11	S.	9	21	23	09	3	29	16	10	
12	M.	9	49	23	47	3	55	16	45	
13	Tu.	10	20			4	24	17	19	
14	W.	0	24	10	53	4	56	17	53	
15	Th.	1	02	11	29	5	33	18	28	
16	F.	1	41	12	12	6	11	19	05	
17	Sa.	2	21	12	58	6	55	19	47	
18	S.	3	03	13	57	7	45	20	37	
19	M.	3	47	15	12	8	48	21	33	
20	Tu.	4	32	16	31	10	02	22	34	
21	W.	5	19	17	59	11	10	23	37	
22	Th.	6	10	19	12			12	18	
23	F.	7	03	20	18	0	39	13	25	
24	Sa.	7	51	21	19	1	38	14	24	
25	S.	8	32	22	17	2	25	15	16	
26	M.	9	14	23	10	3	09	16	05	
27	Tu.	9	57			3	54	16	53	
28	W.	0	00	10	43	4	40	17	40	
29	Th.	0	49	11	33	5	29	18	27	
30	F.	1	37	12	29	6	18	19	16	

## JULY.

		H.	M.	H.	M.	H.	M.	H.	M.			H.	M.	H.	M.	H.	M.	H.	M.			H.	M.	H.	M.	H.	M.	H.	M.	
1	Sa.	2	24	13	32	7	12	20	09	1	2	2	59	15	28	8	51	21	11			2	59	15	28	8	51	21	11	
2	S.	3	11	14	44	8	11	21	05	2	3	3	35	16	34	9	45	21	59			3	35	16	34	9	45	21	59	
3	M.	3	57	16	09	9	18	22	04	3	4	4	17	17	57	10	46	22	53			4	17	17	57	10	46	22	53	
4	Tu.	4	43	17	26	10	33	23	02	4	5	5	02	19	26	12	00	23	50			5	02	19	26	12	00	23	50	
5	W.	5	30	18	41	11	41	23	59	5	6	5	49	20	37			23	10			6	43	21	28			23	10	
6	Th.	6	17	19	51			12	43	6	7	6	38	22	09	0	56	14	11			7	38	22	09	0	56	14	11	
7	F.	6	59	20	51	0	53	13	41	7	8	7	29	22	42	1	50	15	05			8	29	22	42	1	50	15	05	
8	Sa.	7	35	21	41	1	33	14	31	8	9	8	12	23	10	2	33	16	22			9	12	23	10	2	33	16	22	
9	S.	8	11	22	23	2	09	15	14	9	10	9	55	23	37	3	49	16	55			10	55	23	37	3	49	16	55	
10	M.	8	46	23	02	2	46	15	55	10	11	10	38			4	27	17	28			11	38			4	27	17	28	
11	Tu.	9	21	23	37	3	23	16	35	11	12	11	05	11	22	5	05	18	00			12	05	11	22	5	05	18	00	
12	W.	9	58			4	02	17	13	12	13	12	03	12	10	6	28	19	03			13	03	12	10	6	28	19	03	
13	Th.	0	09	10	38	5	17	18	24	13	14	13	33	13	47	7	07	19	41			14	33	13	47	7	07	19	41	
14	F.	0	41	11	21	6	00	18	58	14	15	14	03	14	44	8	55	20	25			15	03	14	44	8	55	20	25	
15	Sa.	1	12	12	08	6	48	19	32	15	16	2	05	15	52	9	55	21	07			16	05	15	52	9	55	21	07	
16	S.	1	43	13	02	7	40	20	08	16	17	2	47	16	18	10	06	22	03			17	47	16	18	10	06	22	03	
17	M.	2	18	13	57	8	28	20	53	17	18	3	35	17	18	11	27	23	18			18	35	17	18	11	27	23	18	
18	Tu.	2	56	14	56	9	23	21	49	19	19	4	31	18	51			12	49			19	31	18	51			12	49	
19	W.	3	37	16	09	10	30	22	55	20	20	5	41	20	10	0	36	14	00			21	41	20	10	0	36	14	00	
20	Th.	4	23	17	29	11	50	23	56	21	21	6	47	21	11	1	44	15	01			22	47	21	11	1	44	15	01	
21	F.	5	15	18	54			13	01	22	22	7	50	21	59	2	37	16	35			23	50	21	59	2	37	16	35	
22	Sa.	6	10	20	12	0	58	14	06	23	23	8	47	22	39	3	39	16	51			24	47	22	39	3	39	16	51	
23	S.	7	08	21	17	1	56	15	05	24	24	9	44	23	17	4	20	17	16			25	44	23	17	4	20	17	16	
24	M.	8	04	22	12	2	48	15	58	25	25	10	39	23	52	5	11	17	55			26	39	23	52	5	11	17	55	
25	Tu.	8	55	22	58	3	40	16	47	26	26	11	33			6	01	18	33			27	33			6	01	18	33	
26	W.	9	46	23	43	4	27	17	34	27	27	0	24	12	31	7	41	19	09			28	24	12	31	7	41	19	09	
27	Th.	10	40			5	17	18	19	28	28	0	55	13	17	8	03	20	52			29	55	13	17	8	03	20	52	
28	F.	0	27	11	35	6	09	19	06	29	29	1	26	14	04			20	20			30	26	14	04			20	20	
29	Sa.	1	09	12	33	7	09	19	43	30	30	1	59	14	55			20	52			31	59	14	55			20	52	
30	S.	1	48	13	34	8	01	20	28	31	31	2	31	15	58			20	20				2	31	15	58			20	20
31	M.	2	24	14	31																									

## AUGUST.

JULY.										H. M.		H. M.		H. M.		H. M.		H. M.	
		H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.	H.	M.
1	Sa.	2	24	13	32	7	12	20	09	1	2	15	28	8	51	21	11	21	11
2	S.	3	11	14	44	8	11	21	05	2	3	16	34	9	45	21	59	21	59
3	M.	3	57	16	09	9	18	22	04	3	4	17	17	10	46	22	53	22	53
4	W.	4	43	17	26	10	33	23	02	4	5	02	19	12	00	23	50	23	50
5	Th.	5	30	18	41	11	41	23	59	5	6	49	20	0		13	10	13	10
6	F.	6	17	19	51			12	43	6	5	49	20	0	56	14	11	14	11
7	Sa.	6	59	20	51	0	53	13	41	6	6	43	21	1	50	15	05	15	05
8	S.	7	35	21	41	1	33	14	31	7	7	38	22	2	33	15	48	15	48
9	M.	8	11	22	23	2	09	15	14	8	8	29	22	3	13	16	22	16	22
10	W.	8	46	23	02	2	46	15	55	9	9	12	23	3	49	16	55	16	55
11	Th.	9	21	23	37	3	23	16	35	10	9	55	23	4	27	17	28	17	28
12	F.	9	58			4	02	17	13	11	10	38		5	05	18	00	18	00
13	Sa.	0	09	10	38	4	38	17	49	12	0	05	11	6	23	19	03	19	03
14	S.	0	41	11	21	5	17	18	24	13	0	34	12	7	07	19	41	18	31
15	M.	0	12	12	08	6	00	18	58	14	1	03	12	8	55	20	25	20	25
16	Tu.	1	43	13	02	6	48	19	32	15	2	05	14	9	44	21	07	21	07
17	W.	1	28	13	57	7	40	20	08	16	2	47	15	10	06	22	03	22	03
18	Th.	2	56	14	56	8	28	21	49	17	3	35	17	11	27	23	18	23	18
19	F.	3	37	16	09	9	23	22	55	18	4	31	18			12	49	12	49
20	Sa.	4	23	17	29	10	30	22	56	19	5	41	20	0	36	14	00	14	00
21	S.	5	15	18	54	11	50	23	56	20	6	47	21	1	44	15	01	15	01
22	M.	6	10	20	12			13	01	21	7	50	21	2	37	15	51	16	35
23	Tu.	7	08	21	17	0	58	14	06	22	8	47	22	3	30	16	35	16	35
24	W.	8	04	22	12	1	56	15	05	23	9	44	23	4	20	17	16	17	16
25	Th.	8	55	22	58	2	48	15	58	24	10	39	23	5	11	17	55	17	55
26	F.	9	46	23	43	3	40	16	47	25	11	33		6	01	18	33	18	33
27	Sa.	10	40			4	27	17	34	26	0	24	12	7	21	19	44	19	44
28	S.	0	27	11	35	5	17	18	19	27	0	55	13	8	03	20	20	20	20
29	M.	1	09	12	33	6	09	19	03	28	1	26	14	9	49	20	52	20	52
30	Tu.	1	48	13	34	7	04	19	46	29	1	59	14	10					
31	W.	2	24	14	31	8	01	20	28	30	2	31	15	11					

The Time used is Atlantic Standard for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the leading ports on Northumberland strait are given on page 9.



SEPTEMBER.										OCTOBER.											
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.	Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.					Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.	H.	M.	
1	F.	3	02	17	18	9	47	21	36		1	\$.	2	42	18	16	10	19	22	08	
2	Sa.	3	46	18	59	11	05	22	50		2	M.	3	55	19	32	11	58	23	46	
3	\$.	4	50	20	16			12	34		3	Tu.	5	33	20	16			13	13	
4	M.	6	04	21	03	0	18	13	52		4	W.	6	57	20	49	0	59	14	02	
5	Tu.	7	19	21	35	1	26	14	43		5	Th.	7	59	21	17	1	44	14	45	
6	W.	8	14	22	03	2	09	15	20		6	F.	8	50	21	44	2	28	15	24	
7	Th.	9	00	22	29	2	50	15	55		7	Sa.	9	43	22	12	3	11	15	56	
8	F.	9	46	22	56	3	31	16	29	○	8	\$.	10	22	22	42	3	54	16	27	
9	Sa.	10	33	23	24	4	11	17	01		9	M.	11	03	23	14	4	28	16	59	
10	\$.	11	17	23	54	4	52	17	32		10	Tu.	11	49	23	44	5	03	17	34	
11	M.			12	00	5	26	18	04		11	W.			12	40	5	43	18	03	
12	Tu.	0	25	12	47	6	05	18	39		12	Th.	0	11	13	35	6	28	18	36	
13	W.	0	57	13	40	6	47	19	18		13	F.	0	44	14	37	7	19	19	19	
14	Th.	1	26	14	39	7	35	19	52		14	Sa.	1	25	15	57	8	17	20	16	
15	F.	1	55	15	49	8	30	20	35	○	15	\$.	2	21	17	23	9	35	21	35	
16	Sa.	2	44	17	19	9	39	21	40		16	M.	3	39	18	41	11	06	23	14	
17	\$.	3	54	18	48	11	10	23	10		17	Tu.	5	18	19	41			12	34	
18	M.	5	18	19	59			12	43		18	W.	6	51	20	29	0	36	13	45	
19	Tu.	6	38	20	52	0	33	13	55		19	Th.	8	02	21	05	1	38	14	37	
20	W.	7	53	21	35	1	38	14	53		20	F.	9	05	21	36	2	28	15	15	
21	Th.	8	59	22	10	2	35	15	39		21	Sa.	9	53	22	05	3	14	15	49	
22	F.	9	57	22	43	3	22	16	17	○	22	\$.	10	34	22	32	3	50	16	22	
23	Sa.	10	48	23	14	4	07	16	52		23	M.	11	13	22	58	4	25	16	54	
24	\$.	11	32	23	44	4	51	17	26		24	Tu.	11	51	23	22	5	00	17	25	
25	M.	11	54			5	27	17	59		25	W.	12	30	23	42	5	36	17	47	
26	Tu.	0	13	12	54	6	04	18	32		26	Th.			12	12	6	14	18	12	
27	W.	0	41	13	39	6	42	19	06		27	F.	0	06	13	57	6	54	18	43	
28	Th.	1	06	14	29	7	22	19	32		28	Sa.	0	35	14	50	7	39	19	22	
29	F.	1	28	15	27	8	06	20	03		29	\$.	1	11	15	58	8	31	20	14	
30	Sa.	1	57	16	37	9	00	20	50	○	30	M.	2	00	17	14	9	33	21	28	
											31	Tu.	3	22	18	19	10	54	23	04	

NOVEMBER.										DECEMBER.											
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.	Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.					Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.				H.	M.	H.	M.	H.	M.	H.	M.	
1	W.	5	00	19	05			12	12		1	F.	5	53	18	43			12	04	
2	Th.	6	26	19	44	0	20	13	13		2	Sa.	7	09	19	29	0	33	13	05	
3	F.	7	38	20	21	1	17	13	58		3	\$.	8	10	20	09	1	24	13	56	
4	Sa.	8	35	20	57	2	06	14	40		4	M.	9	03	20	44	2	11	14	43	
5	\$.	9	20	21	32	2	44	15	20		5	Tu.	9	54	21	15	2	57	15	17	
6	M.	10	03	22	07	3	22	15	58	○	6	W.	10	43	21	50	3	44	15	53	
7	Tu.	10	47	22	39	4	01	16	25		7	Th.	11	33	22	31	4	33	16	32	
8	W.	11	35	23	08	4	42	16	56		8	F.	12	28	23	20	5	23	17	15	
9	Th.	12	31	23	42	5	29	17	33		9	Sa.			13	26	6	14	18	05	
10	F.			13	32	6	21	18	16		10	\$.	0	15	14	24	7	06	19	01	
11	Sa.	0	22	14	39	7	17	19	07		11	M.	1	17	15	21	8	02	20	06	
12	\$.	1	13	15	49	8	18	20	09		12	Tu.	2	27	16	16	9	08	21	17	
13	M.	2	20	16	58	9	29	21	32	○	13	W.	3	46	17	09	10	20	22	34	
14	Tu.	3	44	17	58	10	51	23	02		14	Th.	5	14	17	59	11	27	23	51	
15	W.	5	18	18	52			12	06		15	F.	6	35	18	45			12	27	
16	Th.	6	45	19	37	0	21	13	06		16	Sa.	7	45	19	28	0	51	13	20	
17	F.	8	02	20	16	1	25	13	57		17	\$.	8	44	20	08	1	40	14	06	
18	Sa.	8	57	20	51	2	10	14	41		18	M.	9	33	20	43	2	25	14	38	
19	\$.	9	43	21	24	2	50	15	21		19	Tu.	10	15	21	11	3	07	15	08	
20	M.	10	24	21	51	3	29	15	56	○	20	W.	10	55	21	40	3	47	15	39	
21	Tu.	11	02	22	12	4	06	16	18		21	Th.	11	32	22	10	4	25	16	10	
22	W.	11	41	22	36	4	42	16	41		22	F.	12	08	22	42	5	02	16	44	
23	Th.	12	21	23	04	5	18	17	08		23	Sa.	12	44	23	18	5	39	17	21	
24	F.	13	02	23	35	5	55	17	40		24	\$.	13	21	23	59	6	17	18	04	
25	Sa.			13	45	6	34	18	20		25	M.			13	58	6	54	18	51	
26	\$.	0	12	14	30	7	16	19	05		26	Tu.	0	45	14	36	7	32	19	41	
27	M.	0	57	15	19	8	03	20	00		27	W.	1	38	15	15	8	13	20	36	
28	Tu.	1	51	16	10	8	57	21	04	○	28	Th.	2	50	15	56	9	03	21	33	
29	W.	3	02	17	02	9	56	22	16		29	F.	4	00	16	43	10	02	22	41	
30	Th.	4	27	17	53	10	59	23	31		30	Sa.	5	18	17	34	11	05	23	46	
											31	\$.	6	35	18	24			12	07	

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the leading ports on Northumberland strait are given on page 9.

## JANUARY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
		H. M.	H. M.	H. M.	H. M.	
1	§.	9 50	20 57	9 02	15 12	
2	M.	10 23	21 36	3 40	15 50	
3	Tu.	10 58	22 16	4 19	16 29	
4	W.	11 38	23 01	4 58	17 09	
5	Th.	12 20	23 49	5 38	17 51	
6	F.	.....	13 04	6 22	18 36	
7	Sa.	0 44	13 49	7 10	19 28	
8	§.	1 45	14 35	8 04	20 31	☾
9	M.	2 54	15 24	9 04	21 42	
10	Tu.	4 20	16 18	10 10	22 56	
11	W.	5 42	17 15	11 20	.....	
12	Th.	6 53	18 16	0 04	12 25	
13	F.	7 51	19 10	1 02	13 24	
14	Sa.	8 43	20 03	1 56	14 16	○
15	§.	9 33	20 54	2 46	15 00	
16	M.	10 18	21 44	3 34	15 43	
17	Tu.	11 01	22 34	4 21	16 27	
18	W.	11 43	23 24	5 06	17 13	
19	Th.	.....	12 24	5 49	18 00	
20	F.	0 15	13 04	6 33	18 48	
21	Sa.	1 08	13 43	7 18	19 38	
22	§.	2 07	14 23	8 04	20 33	☾
23	M.	3 16	15 05	8 52	21 38	
24	Tu.	4 40	15 54	9 48	22 49	
25	W.	5 52	16 49	10 54	23 51	
26	Th.	6 56	17 45	.....	12 00	
27	F.	7 46	18 37	0 46	12 56	
28	Sa.	8 24	19 25	1 35	13 45	
29	§.	9 00	20 07	2 18	14 28	
30	M.	9 31	20 47	2 56	15 04	☾
31	Tu.	10 03	21 26	3 32	15 36	

## FEBRUARY.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.
		Morn'g.	After'n.	Morn'g.	After'n.	
		H. M.	H. M.	H. M.	H. M.	
1	W.	10 36	22 06	4 07	16 09	
2	Th.	11 10	22 50	4 41	16 45	
3	F.	11 45	23 39	5 16	17 25	
4	Sa.	.....	12 22	5 53	18 10	
5	§.	0 34	13 02	6 36	19 00	
6	M.	1 36	13 47	7 27	19 56	☾
7	Tu.	2 50	14 40	8 30	21 14	
8	W.	4 14	15 42	9 42	22 36	
9	Th.	5 36	16 53	11 00	23 55	
10	F.	6 58	18 04	.....	12 15	
11	Sa.	7 56	19 10	0 59	13 16	
12	§.	8 39	20 06	1 54	14 06	
13	M.	9 17	20 56	2 43	14 53	○
14	Tu.	9 52	21 42	3 26	15 35	
15	W.	10 26	22 25	4 04	16 12	
16	Th.	10 59	23 07	4 40	16 48	
17	F.	11 32	23 50	5 15	17 25	
18	Sa.	.....	12 04	5 51	18 06	
19	§.	0 34	12 36	6 28	18 52	
20	M.	1 25	13 09	7 07	19 42	☾
21	Tu.	2 28	13 47	7 50	20 39	
22	W.	3 43	14 37	8 46	21 51	
23	Th.	5 20	15 46	10 05	23 16	
24	F.	6 30	17 00	11 32	.....	
25	Sa.	7 20	18 08	0 24	12 40	
26	§.	8 00	19 06	1 14	13 28	
27	M.	8 32	19 56	1 57	14 06	
28	Tu.	9 00	20 38	2 36	14 37	☾

## MARCH.

		H. M.		H. M.		
		H. M.	H. M.	H. M.	H. M.	
1	W.	9 27	21 19	3 11	15 07	
2	Th.	9 54	22 00	3 43	15 39	
3	F.	10 23	22 43	4 14	16 17	
4	Sa.	10 57	23 29	4 47	16 58	
5	§.	11 35	.....	5 26	17 42	
6	M.	0 21	12 17	6 10	18 32	
7	Tu.	1 23	13 05	6 59	19 33	☾
8	W.	2 36	13 58	7 56	20 54	
9	Th.	4 38	15 08	9 22	22 30	
10	F.	5 41	16 35	10 48	23 54	
11	Sa.	6 39	18 00	.....	12 04	
12	§.	7 32	19 08	0 55	13 06	
13	M.	8 13	20 00	1 44	13 55	
14	Tu.	8 45	20 44	2 28	14 34	○
15	W.	9 15	21 25	3 05	15 10	
16	Th.	9 44	22 04	3 40	15 44	
17	F.	10 12	22 41	4 14	16 17	
18	Sa.	10 40	23 19	4 46	16 51	
19	§.	11 08	.....	5 16	17 28	
20	M.	0 05	11 37	5 47	18 08	
21	Tu.	0 56	12 08	6 21	18 53	☾
22	W.	1 52	12 44	6 59	19 46	
23	Th.	3 09	13 35	7 48	20 55	
24	F.	4 45	14 56	9 20	22 26	
25	Sa.	5 58	16 30	10 59	23 49	
26	§.	6 40	17 48	.....	12 07	
27	M.	7 14	18 50	0 44	12 58	
28	Tu.	7 46	19 39	1 25	13 35	
29	W.	8 16	20 22	2 03	14 09	☾
30	Th.	8 45	21 02	2 38	14 42	
31	F.	9 16	21 43	3 12	15 18	

## APRIL.

		H. M.		H. M.		
		H. M.	H. M.	H. M.	H. M.	
1	Sa.	9 52	22 30	3 47	15 58	
2	§.	10 31	23 25	4 26	16 42	
3	M.	11 11	.....	5 08	17 29	
4	Tu.	0 26	11 52	5 54	18 22	
5	W.	1 36	12 39	6 49	19 28	☾
6	Th.	3 00	13 40	7 58	20 48	
7	F.	4 23	15 09	9 26	22 18	
8	Sa.	5 32	16 48	11 00	23 38	
9	§.	6 28	18 04	.....	12 09	
10	M.	7 12	19 00	0 44	13 00	
11	Tu.	7 44	19 49	1 25	13 39	
12	W.	8 13	20 34	2 03	14 14	
13	Th.	8 41	21 15	2 38	14 47	○
14	F.	9 08	21 54	3 09	15 19	
15	Sa.	9 34	22 32	3 39	15 51	
16	§.	10 01	23 09	4 09	16 25	
17	M.	10 29	23 48	4 40	17 01	
18	Tu.	10 58	.....	5 13	17 39	
19	W.	0 34	11 29	5 49	18 22	
20	Th.	1 29	12 05	6 30	19 12	
21	F.	2 31	12 56	7 23	20 15	☾
22	Sa.	3 50	14 12	8 42	21 36	
23	§.	4 53	15 52	10 13	22 56	
24	M.	5 42	17 21	11 28	23 57	
25	Tu.	6 23	18 21	.....	12 24	
26	W.	7 00	19 15	0 46	13 05	
27	Th.	7 35	20 06	1 28	13 43	
28	F.	8 10	20 56	2 08	14 20	☾
29	Sa.	8 46	21 45	2 47	15 00	
30	§.	9 23	22 34	3 26	15 45	

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the region of Miramichi bay, the north coast of Prince Edward island and Cabot strait as far as Sydney, are given on page 9.

MAY.														JUNE.													
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.				Date.	Day.	HIGH WATER.				LOW WATER.				Moon.			
		Morn'g.		After'n.		Morn'g.		After'n.								Morn'g.		After'n.									
		H.	M.	H.	M.	H.	M.	H.	M.							H.	M.	H.	M.	H.	M.	H.	M.				
1	M.	10	02	23	24	4	06	16	36				1	Th.	0	10	11	18	5	32	18	10					
2	Tu.	10	46			4	50	17	30				2	F.	1	09	12	20	6	29	19	11					
3	W.	0	20	11	36	5	43	18	28				3	Sa.	2	12	13	35	7	36	20	17					
4	Th.	1	27	12	34	6	43	19	31				4	S.	3	14	14	57	8	50	21	27					
5	F.	2	42	13	43	7	52	20	41				5	M.	4	12	16	20	10	02	22	35					
6	Sa.	3	56	15	08	9	15	22	00				6	Tu.	5	00	17	32	11	03	23	30					
7	S.	5	02	16	40	10	42	23	16				7	W.	5	39	18	32	11	56							
8	M.	5	52	18	00	11	51						8	Th.	6	13	19	24	0	14	12	43					
9	Tu.	6	30	18	37	0	09	12	34				9	F.	6	46	20	09	0	56	13	26					
10	W.	7	03	19	46	0	52	13	12				10	Sa.	7	19	20	49	1	35	14	06					
11	Th.	7	34	20	28	1	31	13	48				11	S.	7	53	21	28	2	11	14	43					
12	F.	8	04	21	05	2	07	14	23				12	M.	8	28	22	06	2	45	15	18					
13	Sa.	8	33	21	40	2	39	14	58				13	Tu.	9	04	22	43	3	20	15	52					
14	S.	9	01	22	16	3	10	15	33				14	W.	9	40	23	21	3	56	16	26					
15	M.	9	28	22	54	3	41	16	08				15	Th.	10	16			4	33	17	01					
16	Tu.	9	55	23	34	4	13	16	44				16	F.	0	00	10	54	5	11	17	38					
17	W.	10	24			4	47	17	21				17	Sa.	0	40	11	37	5	51	18	20					
18	Th.	0	17	11	00	5	24	18	00				18	S.	1	22	12	29	6	35	19	10					
19	F.	1	05	11	44	6	06	18	44				19	M.	2	06	13	35	7	30	20	06					
20	Sa.	2	01	12	40	7	00	19	38				20	Tu.	2	51	14	50	8	35	21	07					
21	S.	3	02	13	54	8	08	20	50				21	W.	3	38	16	18	9	43	22	10					
22	M.	3	58	15	23	9	25	22	01				22	Th.	4	29	17	31	10	51	23	12					
23	Tu.	4	45	16	42	10	40	23	06				23	F.	5	22	18	37	11	58							
24	W.	5	28	17	52	11	38						24	Sa.	6	14	19	38	0	11	12	57					
25	Th.	6	10	18	56	0	00	12	29				25	S.	7	04	20	36	1	07	13	49					
26	F.	6	51	19	52	0	49	13	18				26	M.	7	53	21	29	1	59	14	38					
27	Sa.	7	31	20	41	1	36	14	05				27	Tu.	8	41	22	19	2	50	15	26					
28	S.	8	11	21	31	2	21	14	50				28	W.	9	30	23	08	3	40	16	13					
29	M.	8	52	22	22	3	06	15	35				29	Th.	10	20	23	56	4	29	17	00					
30	Tu.	9	35	23	14	3	52	16	22				30	F.	11	13			5	18	17	49					
31	W.	10	23			4	40	17	13																		

JULY.														AUGUST.													
Date.	Day.	HIGH WATER.				LOW WATER.				Moon.				Date.	Day.	HIGH WATER.				LOW WATER.				Moon.			
		Morn'g.		After'n.		Morn'g.		After'n.								Morn'g.		After'n.									
		H.	M.	H.	M.	H.	M.	H.	M.							H.	M.	H.	M.	H.	M.	H.	M.				
1	Sa.	0	43	12	11	6	08	18	42				1	Tu.	1	18	13	47	7	24	19	44					
2	S.	1	30	13	16	7	01	19	38				2	W.	1	54	14	53	8	18	20	32					
3	M.	2	16	14	28	8	00	20	37				3	Th.	2	36	16	16	9	19	21	26					
4	Tu.	3	02	15	45	9	06	21	35				4	F.	3	25	17	45	10	33	22	32					
5	W.	3	49	17	00	10	14	22	32				5	Sa.	4	21	18	56	11	43	23	46					
6	Th.	4	36	18	10	11	16	23	26				6	S.	5	22	19	47			12	44					
7	F.	5	22	19	10			12	14				7	M.	6	22	20	28	0	46	13	38					
8	Sa.	6	07	20	00	0	15	13	04				8	Tu.	7	16	21	01	1	33	14	21					
9	S.	6	50	20	42	0	59	13	47				9	W.	7	59	21	29	2	13	14	55					
10	M.	7	30	21	21	1	42	14	28				10	Th.	8	39	21	56	2	49	15	28					
11	Tu.	8	08	21	56	2	23	15	08				11	F.	9	17	22	24	3	23	16	01					
12	W.	8	45	22	28	3	02	15	46				12	Sa.	9	54	22	53	3	55	16	33					
13	Th.	9	22	23	00	3	38	16	22				13	S.	10	33	23	22	4	27	17	04					
14	F.	10	00	23	31	4	13	16	57				14	M.	11	17	23	52	5	01	17	36					
15	Sa.	10	40			4	50	17	31				15	Tu.			12	06	5	40	18	14					
16	S.	0	03	11	25	5	30	18	05				16	W.	0	24	13	03	6	28	18	58					
17	M.	0	37	12	16	6	13	18	41				17	Th.	1	06	14	11	7	28	19	49					
18	Tu.	1	15	13	15	7	01	19	26				18	F.	1	58	15	37	8	39	20	53					
19	W.	1	56	14	28	7	56	20	22				19	Sa.	3	03	17	10	10	00	22	14					
20	Th.	2	42	15	48	9	03	21	28				20	S.	4	20	18	29	11	22	23	36					
21	F.	3	38	17	13	10	23	22	38				21	M.	5	31	19	30			12	33					
22	Sa.	4	42	18	31	11	34	23	48				22	Tu.	6	37	20	18	0	44	13	34					
23	S.	5	47	19	36			12	39				23	W.	7	34	20	58	1	37	14	24					
24	M.	6	48	20	31	0	52	13	38				24	Th.	8	28	21	36	2	26	15	08					
25	Tu.	7	42	21	17	1	48	14	31				25	F.	9	18	22	11	3	10	15	49					
26	W.	8	33	22	02	2	40	15	20				26	Sa.	10	05	22	43	3	53	16	28					
27	Th.	9	24	22	46	3	27	16	07				27	S.	10	50	23	14	4	34	17	06					
28	F.	10	14	23	28	4	13	16	52				28	M.	11	36	23	45	5	14	17	42					
29	Sa.	11	05			4	59	17	36				29	Tu.			12	23	5	54	18	17					
30	S.	0	07	11	57	5	46	18	19				30	W.	0	18	13	14	6	36	18	53					
31	M.	0	43	12	50	6	34	19	01				31	Th.	0	54	14	17	7	22	19	34					

The TIME used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the region of Miramichi bay, the north coast of Prince Edward Island and Cabot strait as far as Sydney, are given on page 9.



## SEPTEMBER.

Date.	Day.	HIGH WATER.				LOW WATER.				Moon.
		Morn'g.		After'n.		Morn'g.		After'n.		
		H.	M.	H.	M.	H.	M.	H.	M.	
1	F.	1	34	15	37	8	20	20	26	
2	Sa.	2	25	17	18	9	38	21	46	
3	S.	3	34	18	35	11	07	23	18	
4	M.	4	51	19	22			12	25	
5	Tu.	6	06	19	54	0	26	13	16	
6	W.	6	58	20	22	1	09	13	53	
7	Th.	7	39	20	48	1	46	14	28	
8	F.	8	18	21	15	2	21	15	02	
9	Sa.	8	56	21	43	2	53	15	34	
10	S.	9	36	22	13	3	25	16	05	
11	M.	10	19	22	44	3	59	16	37	
12	Tu.	11	06	23	16	4	38	17	12	
13	W.	11	59	23	49	5	20	17	51	
14	Th.			12	58	6	08	18	34	
15	F.	0	27	14	08	7	03	19	25	
16	Sa.	1	23	15	38	8	12	20	36	
17	S.	2	38	17	07	9	43	22	10	
18	M.	4	05	18	18	11	16	23	33	
19	Tu.	5	25	19	11			12	28	
20	W.	6	37	19	54	0	38	13	26	
21	Th.	7	38	20	29	1	31	14	12	
22	F.	8	29	21	02	2	12	14	50	
23	Sa.	9	11	21	33	2	49	15	25	
24	S.	9	51	22	03	3	24	15	59	
25	M.	10	13	22	32	4	00	16	32	
26	Tu.	11	13	23	00	4	37	17	05	
27	W.	11	58	23	29	5	15	17	39	
28	Th.			12	48	5	55	18	14	
29	F.	0	00	13	46	6	39	18	53	
30	Sa.	0	36	14	56	7	33	19	46	

## OCTOBER.

Date.	Day.	HIGH WATER.		LOW WATER.		Moon.	
		Morn'g.	After'n.	Morn'g.	After'n.		
		H.	M.	H.	M.		
1	S.	1	26	8	52	21	08
2	M.	2	42	10	31	22	46
3	Tu.	4	20	11	46	23	59
4	W.	5	41			12	35
5	Th.	6	38	0	40	13	18
6	F.	7	22	1	18	13	57
7	Sa.	8	02	1	52	14	29
8	M.	8	41	2	27	15	00
9	Tu.	9	22	3	01	15	32
10	W.	10	08	3	36	16	07
11	Th.	10	59	4	16	16	45
12	F.	11	54	5	01	17	26
13	Sa.			5	52	18	15
14	S.	0	09	6	50	19	16
15	M.	1	08	8	08	20	35
16	Tu.	2	26	9	39	22	14
17	W.	4	02	11	07	23	32
18	Th.	5	30			12	18
19	F.	6	34	0	28	13	10
20	Sa.	7	28	1	10	13	48
21	S.	8	12	1	47	14	22
22	M.	8	53	2	23	14	55
23	Tu.	9	32	2	58	15	27
24	W.	10	10	3	33	15	58
25	Th.	10	49	4	09	16	29
26	F.	11	31	4	47	17	02
27	Sa.	12	16	5	27	17	39
28	S.	13	09	6	12	18	22
29	M.			7	04	19	14
30	Tu.	0	47	8	06	20	28
31	W.	2	06	9	27	22	00

## NOVEMBER.

		H. M.		H. M.		
		H. M.	H. M.	H. M.	H. M.	
1	W.	3 39	17 24	10 45	23 10	
2	Th.	4 58	18 03	11 46	23 59	
3	F.	6 01	18 40		12 31	
4	Sa.	6 54	19 16	0 39	13 13	
5	S.	8 39	19 51	1 17	13 53	
6	M.	8 22	20 26	1 55	14 31	
7	Tu.	9 06	21 02	2 34	15 07	
8	W.	9 54	21 40	3 15	15 46	
9	Th.	10 50	22 21	4 02	16 29	
10	F.	11 51	23 06	4 54	17 16	
11	Sa.		12 58	5 50	18 07	
12	S.	0 00	14 08	6 52	19 09	
13	M.	1 07	15 17	8 02	20 28	
14	Tu.	2 23	16 17	9 24	21 52	
15	W.	3 57	17 11	10 39	23 03	
16	Th.	5 17	17 56	11 39	23 58	
17	F.	6 21	18 35		12 30	
18	Sa.	7 16	19 10	0 43	13 14	
19	S.	8 02	19 43	1 23	13 54	
20	M.	8 43	20 14	2 02	14 29	
21	Tu.	9 21	20 44	2 39	15 00	
22	W.	10 00	21 15	3 15	15 31	
23	Th.	10 40	21 48	3 51	16 04	
24	F.	11 21	22 22	4 28	16 40	
25	Sa.	12 04	22 59	5 07	17 20	
26	S.	12 49	23 41	5 49	18 05	
27	M.		13 38	6 36	18 56	
28	Tu.	0 30	14 29	7 30	19 54	
29	W.	1 34	15 21	8 29	20 58	
30	Th.	2 50	16 12	9 32	22 04	

## DECEMBER.

		H. M.		H. M.		
		H. M.	H. M.	H. M.	H. M.	
1	F.	4 12	17 02	10 37	23 06	
2	Sa.	5 28	17 48	11 38	23 57	
3	S.	6 29	18 28		12 29	
4	M.	7 22	19 07	0 44	13 16	
5	Tu.	8 13	19 47	1 30	13 59	
6	W.	9 02	20 29	2 17	14 43	
7	Th.	9 52	21 15	3 06	15 28	
8	F.	10 47	22 07	3 56	16 15	
9	Sa.	11 45	23 02	4 47	17 05	
10	S.		12 43	5 39	18 01	
11	M.	0 01	13 40	6 35	19 02	
12	Tu.	1 06	14 35	7 41	20 07	
13	W.	2 18	15 28	8 53	21 16	
14	Th.	3 37	16 18	10 00	22 24	
15	F.	4 54	17 04	11 53	23 24	
16	Sa.	6 04	17 47		12 39	
17	S.	7 03	18 27	0 13	13 20	
18	M.	7 52	19 06	0 58	13 58	
19	Tu.	8 34	19 43	1 40	14 35	
20	W.	9 14	20 19	2 20	15 10	
21	Th.	9 51	20 54	3 58	15 44	
22	F.	10 27	21 29	4 12	16 21	
23	Sa.	11 03	22 05	4 50	17 00	
24	S.	11 40	22 43	5 27	17 41	
25	M.	12 17	23 24	6 05	18 23	
26	Tu.		12 55	6 46	19 09	
27	W.	0 10	13 34	7 36	20 06	
28	Th.	1 09	14 15	8 35	21 14	
29	F.	2 19	15 02	9 38	22 19	
30	Sa.	3 37	15 53	10 40	23 19	
31	S.	4 54	16 47			

The Time used is Atlantic Standard, for the 60th Meridian. It is counted from 0 to 24 hours, from midnight to midnight.

TIDAL DIFFERENCES for the region of Miramichi bay, the north coast of Prince Edward island and Cabot strait as far as Sydney, are given on page 9.

## INFORMATION ON CURRENTS.

### THE GASPÉ CURRENT.

The following description refers chiefly to the region extending from Fame point to Cape Gaspé; as it is there that vessels make and leave the Gaspé coast on all routes which lead into the St. Lawrence. It is based upon investigations made by Dr. W. B. Dawson in July and September, 1895.

*The usual current.*—While ordinary weather prevails, the current in the offing of the Gaspé coast runs constantly to the S.E. and S.S.E. (magnetic) or outwards from the St. Lawrence to the Gulf. In the vicinity of Fame point, it usually occupies a belt of about 12 miles in width, lying between 2 and 14 miles off shore. This belt appears to become narrower and the current stronger towards Cape Rosier, and between it and the shore there are tidal streams in both directions. In passing Cape Gaspé it keeps closer to the shore, cutting off the in-shore streams, and its direction there varies from S.S.E. to S.S.W. The speed of this current usually ranges from one to two knots; the highest observed being 2·81 knots per hour.

*Displacement of the current.*—The main current setting south-eastward was found at times to lie in the middle of the passage between the Gaspé coast and Anticosti. When the current is in this position, the area between it and the Gaspé coast may be occupied by weak and fluctuating currents, or even by a reverse current setting inwards. This position of the current in the middle of the passage must therefore be regarded as a displacement of the current, or an alternative route which it may take.

*Tidal influence.*—When the current runs constantly in one direction, whatever position it may take, and whether it runs in its usual south-eastward direction or is reversed, it is always subject to a fluctuation in speed which corresponds with the tide. When the current has its usual outward direction, it is strongest at low water and weakest at high water; but when the current runs inwards the reverse is the case.

*Influence of the wind.*—It appears probable that the chief reason that this current keeps along the Gaspé coast is because the prevailing winds on the Lower St. Lawrence are towards the south-east side. The current appears to be kept away from the coast and to be most disturbed when the winds are from the southward of west (magnetic) on the Lower St. Lawrence, and at the same time south or south-east in the Gaspé region; as they then have an off-shore direction along that part of the coast which the Gaspé current usually follows.

### CURRENT IN BELLE ISLE STRAIT.

This strait has a width of 10 to 18 miles for 50 miles of its length, beyond which it widens rapidly in both directions. The currents were examined by Dr. Dawson in July and September, 1894, and throughout the season of 1906, which enables the following summary to be given.

*Character of the current.*—The current is primarily of a tidal character; the typical or standard movement of the water consisting of tidal streams which are nearly equal in the two directions, during flood and ebb. The flood sets westward or inward from the ocean, and the ebb sets eastward. These tidal streams vary in the usual way from springs to neaps, and they are also subject at times to a large diurnal inequality which follows the change in the moon's declination.

*Dominant flow.*—While the tidal fluctuation goes on continuously, the water usually makes on the whole in one direction or the other through the strait. This preponderance of flow will sometimes attain such strength as to overcome and reverse the ordinary tidal streams.

*Strength.*—When the current is equal in the two directions, the velocity at spring tides is 1·50 knots per hour each way, and at neap tides 0·63 knot, on the average. When the tidal streams are most unequal, owing to diurnal inequality, the velocity may amount to  $2\frac{1}{2}$  knots in one direction or the other. In addition, there may be dominant flow; its greatest observed velocity, apart from tidal fluctuation, being  $1\frac{3}{4}$  knots westward, and  $1\frac{1}{2}$  knots eastward. As a result of a combination of these elements, the extreme velocities observed were 3·45 knots westward and 2·83 knots eastward.

*Wind disturbance.*—The disturbance of the current, caused by the direct action of the wind, is remarkably little considering the situation of this strait. The tidal streams, as they turn, often set directly against the wind. The dominant flow cannot be considered to be a direct result of the local wind in the strait, as it does not usually have the same direction as the wind.

*Temperature.*—The temperature of the water does not afford a reliable indication of the direction of the tidal streams or of the dominant flow at the time; nor can reliance be placed on the water temperature to indicate the proximity of icebergs.

## CURRENTS OFF THE SOUTH AND EAST COASTS OF NEWFOUNDLAND.

From investigations made by Dr. Dawson during the season of 1903, from May to September; by means of a steamer anchored at various points in the vicinity of the steamship route, which passes south of Newfoundland.

*General character.*—When more than five miles from shore, there are no currents at any time throughout the season which exceed one knot in any direction. The only exception to this is the Labrador current along the east coast, in which a maximum speed of 1.15 knots was observed. This emphatically contradicts the statements so often made, that strong currents are here met with.

*Tidal influence.*—On the south coast, when within four or five miles of the shore, the current is chiefly governed by the tide, and sets in the two opposite directions alternately; but the farther out the point of observation, the greater the tendency for the direction of the current to veer completely around the compass.

*General set and indraught.*—The water makes westward on the whole, along the south coast, from Cape Race towards Placentia bay; that is to say, when a long average is taken, the set is more frequently in that direction than in any other. With regard to indraught towards the bays, the water makes inwards on the whole on the eastern side of Placentia bay, in the same sense that it makes westward along the south coast. A corresponding indraught is felt at certain times of the tide, on the east side of St. Marys bay. As already noted regarding the currents in general, these indraughts do not exceed one knot at an offing of five miles or more.

*The Labrador current.*—This current sets very constantly to the south-west, for a width of 30 or 40 miles off the eastern coast. During times of disturbance, it may set south-eastward, or even be reversed on the surface. When such disturbance occurs, it is usually for part of a day immediately before a gale comes on. It shows a fluctuation in speed with the tide, similar in description to the Gaspé current: being stronger during the flood tide, and weaker during the ebb.

## CURRENTS AT THE ENTRANCE OF THE BAY OF FUNDY.

From investigations made by Dr. Dawson throughout the two seasons of 1904 and 1907, from May to September; by means of a steamer anchored at a number of points, at  $3\frac{1}{2}$  to 18 miles from shore, on the routes usually taken by steamships, in the region extending from St. John to Cape Sable.

*General character.*—The currents are predominantly tidal in their character, running strongly during flood and ebb in the two directions, which are usually opposite. Any veering, or set in a cross direction, occurs only when the current is weak. At the points farther from shore, the current veers more in turning and does not reverse its direction so promptly. The time of slack water has a definite relation to the tide at St. John, N.B. and it can be found from the St. John tide tables by the use of constant differences, which are given in the published pamphlet on this region.

*Influence of the moon.*—In this region the moon's distance, as it varies from perigee to apogee, alters the strength of the currents quite as markedly as the change from springs to neaps with the moon's phases.

*Disturbance.*—Almost everywhere, the current is as strong down to a depth of 30 fathoms as it is on the surface; and at most places it turns in direction on the surface and below at practically the same time. This has an important bearing on wind disturbance, as it shows that the current will soon regain its normal direction and strength after a storm moderates.

*Special note.*—The characteristic of the current which deserves special attention, is the change found at points only a few miles apart. The behaviour of the current is very regular and constant at any definitely fixed point; but a change in position of even a few miles may make a marked difference in its character. This difference is chiefly in the strength and in the time of slack water, and not so much in the direction. In passing islands, the strength may be very different indeed, according to the offing given; and in channels and passages there may be a difference, between the centre and the sides, of an hour in the time of slack water.

## FULL INFORMATION PUBLISHED IN THE REPORTS.

The information here given regarding the currents in the above regions, is a brief summary made from the Reports issued by this Survey. In these reports, full information is given for the various localities in detail, and the nature of the currents is illustrated by charts and plates. The titles of these reports will be found in the list on page 4; and copies may be had on application to the Department of Marine and Fisheries.



## OBSERVATIONS FROM WHICH TIDAL DIFFERENCES ARE DERIVED.

## THE ST. LAWRENCE RIVER ABOVE QUEBEC.

NOTE.—The semaphores here referred to, were placed in the vicinity of various bars in the river until dredging was completed. Their record shows every three inches of rise and fall of the tide during daylight. The Tide Gauge records are from registering gauges in continuous operation day and night. The Tidal Differences result from comparison with the simultaneous tidal record at Quebec.

*Champlain, Batiscan, Cap à la Roche, Grandines, Pointe Platon, and St. Nicolas.*—Observations at these six points were taken simultaneously with Quebec, during two months, in October 1887 and May 1888, by Mr. R. Steckel of the Public Works department. At some points, these are supplemented by later observations.

*Cap à la Roche.*—Record from the semaphore from July to November, in 1901, 1902, 1903 and 1904. Tide Gauge record from July to November, in the seasons of 1905 and 1906.

*Grandines and Lotbinière.*—Record from the semaphore at Lotbinière from June to November, 1895, and Mr. Steckel's results for Grandines; compared with observations by the Hydrographic Survey in 1902 and 1903.

*Pointe Platon.*—From a reduction of observations by the Hydrographic Survey, from May to October, in the seasons of 1902 and 1903.

*St. Croix Bar.*—Record from the semaphore during 8 months in all, in the seasons of 1897 and 1898.

*St. Augustin Bar.*—Record from the semaphore during three months in 1902, reduced by comparison with the longer record at St. Croix bar.

## LOWER ST. LAWRENCE AND CHALEUR BAY.

*St. Laurent, St. Jean d'Orleans and Berthier.*—By proportional differences in time between Grosse Isle and Quebec; compared with tide-scale observations during three months in 1901 and 1902, obtained by the St. Lawrence Channel Survey.

*Grosse Isle.*—Tide Gauge record during 5 months, May to October, 1900; compared with simultaneous tidal record at Quebec.

*Cranes Island wharf.*—Tide Gauge record for nearly four months; July to November, 1908.

*Bouvier channel.*—By proportional differences between L'Islet and Crane Island, immediately above and below; based on the simultaneous observations of 1908.

*L'Islet.*—Tide Gauge record from May to October, 1900, and July to November, 1908.

*Chaires Island.*—By proportional difference in time between the tidal observation stations above and below.

*Châteaufort.*—Tide Gauge record during two months, September to November, 1897, taken by the Public Works department; compared with simultaneous observations at Quebec.

*Orignaux point.*—Tide Gauge record during 2½ months, June to September, 1900.

*Murray bay.*—Observations at Cap à l'Aigle wharf; obtained by the Hydrographic Survey during one month in July and August, 1905.

*Rivière du Loup.*—Tide Gauge record during 6 months in all, from June to October, in 1900 and 1905.

*Tadoussac.*—Tide Gauge record during 15 months in all; from July to September, 1900, June to December, 1907, and May to November, 1908.

*Trois Pistoles.*—Tide Gauge record during 4 months, June to October, 1908.

*Branche Pts, Green Island, Be Island, Little Mais, Marane and Pointe de Monts.*—By comparison with the Establishments given in the Admiralty list, and the difference in time between the observation stations, as above.

*Cape Chat.*—Tide Gauge record during 2½ months, July to September, 1900.

*Gaspé basin.*—Observations during six days in 1897, compared with the tidal record at Father Point.

*Anticosti Island, South-west point.*—Tide Gauge record during two complete years, from 1895 to 1897.

*Carleton point.*—Head of Chaleur bay. Tide Gauge record during four months, July to November, 1896.

*Dalhousie and Campbellton.*—From difference in time with Carleton point, as shown by the Establishment.

## GULF OF ST. LAWRENCE, NORTHUMBERLAND AND CABOT STRAITS.

*Lower Neguac.*—In Miramichi bay. Tide Gauge record during 2½ months, from July to November, 1896.

*Ant point.*—Head of Miramichi bay. Tide Gauge record during 4½ months, from June to October, 1908.

*Chatham, N.B.*—Tide Gauge record during 5 months, June to November, 1908.

*Neguac, N.B.*—Observations at Nelson opposite. From 49 observations obtained during Public Works surveys in April to June, 1903, simultaneously with observations at Chatham.

*Millerton and Cassin.*—On the Miramichi river. From a series of observations obtained simultaneously with Nelson and Chatham, during the Public Works surveys in 1903, as above.

*Alberton and Grand Ruston, P.E.I.*—Based on 7 to 18 observations in October, 1896; compared with differences of Establishment at Neguac and St. Paul island in the two directions.

*St. Peters bay.*—From 31 observations in October and November, 1896; compared with the Establishments in the two directions, as above.

*Richmond bay.*—From difference of Establishment, intermediate between the above places.

*Souris.*—Tide Gauge record during  $2\frac{1}{2}$  months in 1896 and 4 months in 1903.

*Georgetown.*—Tide Gauge record during 6 months, from June to November, 1908.

*Pictou and Charlottetown.*—Observations obtained as a basis for tide tables and tidal differences, as already detailed with the other ports for which tide tables are published.

*Cape Tormentine.*—Tide Gauge record during  $1\frac{1}{2}$  months, between July and September, 1896.

*Summerside.*—Tide Gauge record during 5 months, June to November, 1901.

*Port Hood, Cape Bear, Cape George, Tatamagouche, Pugwash and Baie Verte.*—From differences of Establishment with the tidal observation stations in the two directions.

*Neil harbour, C.B.*—Tide Gauge record during  $2\frac{1}{2}$  months, August to October, 1901.

*Sydney.*—Observations at Battery point. Tide Gauge record during one lunar month in July, 1901.

*Port aux Basques, Newfoundland.*—Tide Gauge record during 3 months, July to October, 1901.

## ATLANTIC COAST OF NOVA SCOTIA.

NOTE.—On this coast, as the tide is nearly simultaneous with Halifax throughout, the tidal differences are almost all based on difference of Establishment, reduced to Standard time. The localities mentioned below are the only ones at which tidal observations have been obtained. They also serve to check the results.

*Clarke harbour.*—Near Cape Sable. Tide Gauge record during  $3\frac{1}{2}$  months, July to October, 1902.

*Barrington passage.*—Inside Cape Sable island. Tide Gauge record during 3 months, July to October, 1902.

*Shelburne.*—Tide Gauge record during 3 months, July to October, 1902.

*Trepassey harbour, Nfld.*—Near Cape Race. Tide Gauge record during 7 months in all, in 1902 and 1903.

## BAY OF FUNDY.

NOTE.—The Tide Gauge records were obtained from registering gauges in continuous operation, day and night. Tidal differences result from comparison with the simultaneous tidal record at St. John, N.B.

*Pubnico.*—At the Lower East Pubnico wharf. Tide Gauge record during  $3\frac{1}{2}$  months, July to October, 1902.

*Yarmouth.*—Tide Gauge record during two complete years, as a basis for tide tables, as already explained.

*Grand passage.*—Observations at Westport. Tide Gauge record during 4 months, August to December, 1898.

*Digby.*—Tide Gauge record during  $4\frac{1}{2}$  months, August to December, 1898.

*Campobello.*—Observations at Welchpool. Tide Gauge record during  $3\frac{1}{2}$  months, July to November, 1898.

*Eastport.*—In the State of Maine. By difference from Campobello, deduced from the United States tide tables; and referred from Campobello to St. John by the simultaneous observations above indicated.

*St. Andrews.*—From 21 observations obtained during Public Works surveys in August and September, 1900; compared with difference of Establishment.

*Other localities in the lower Bay.*—From difference of Establishment and intermediate values between the tidal observation stations in the two directions.

*Folly point.*—Observations at Hopewell cape, opposite. Tide Gauge record during  $3\frac{1}{2}$  months, July to November, 1898.

*Moncton.*—Tide Gauge record during 3 months, August to November, 1898. The time of arrival of the Bore at Moncton is deduced from 145 observations obtained between August and November, 1898.

*Windsor.*—Tide Gauge record for nearly 2 months, August to October, 1898.

*Parrsborough pier.*—Tide Gauge record during  $2\frac{1}{2}$  months, July to October, 1898.

*Other localities in the upper Bay, above St. John.*—Tidal data are given for all places where the Establishment is determined, based on difference, and comparison with the tidal observation stations in the two directions.



## BELLE ISLE STRAIT.—TIDAL STREAMS AND DOMINANT FLOW.

*General character.*—The current in Belle Isle strait is primarily tidal in its character. While under the control of the tide alone, it will turn regularly and run with equal strength in each direction; the flood setting westward and the ebb eastward. But in addition to this tidal fluctuation, the water has almost always a tendency to make through the strait in one direction more than in the other. While the tidal fluctuation goes on uninterruptedly, the water is thus making a continuous gain to the westward, or to the eastward, as the case may be. This over-balance in one direction we may term the element of *dominant flow* which is super-imposed upon the usual tidal elements. It gives rise to much complication, as it is large in relation to the strength of the tidal streams, especially at the neaps when weak.

*Cause of the dominant flow.*—It must not be hastily assumed that the wind is the cause of the dominant flow. There is no evident relation between the direction of this flow and the local wind, to show that one is the cause of the other. The wind would produce primarily a surface drift, whereas the dominant flow affects the whole body of the water. Examples of a true wind drift have been met with in the strait; but they are rare in the summer season, as the winds are not heavy enough or sufficiently long continued to cause the surface drift to extend to any great depth. It is also to be noted that the dominant flow may continue for a week or more at a time in the one direction, which a wind drift would not do. The probable causes are fully discussed in the Report on Belle Isle strait.

*Practical indications of the direction of the dominant flow.*—The probable direction of the flow may be inferred from the general weather conditions of the region and from the presence or absence of floating icebergs in the strait. It may be taken for granted that there are always some icebergs in the offing of the strait, or eastward in the Atlantic. If a westward flow is dominant at the time, the icebergs, while drifted up and down by the tidal streams, will make their way into the strait; whereas if an eastward flow is dominant, the strait will be free from bergs which are afloat. It is to be noted that this indication is quite independent of what may be the cause of the flow.

To take advantage of this indication, the mariner must be able to distinguish with a fair degree of certainty, the icebergs which are afloat. If they are close to either shore, they are sure to be aground; and they may have been there for a week or more. A berg towards the north side of the strait is more likely to be afloat, as the water there is deeper. In the middle part of the strait, any berg will ground if large enough. It is there a question of size, and the probability of its being aground is stronger if it is at a position where the water shallows to the westward, or if it is over the Centre Bank. The smaller bergs, well clear of the shore, are of course the most likely to be afloat.

The best indications of practical value, including the influence of weather conditions, may be summarized as follows:—

(1.) If the strait is clear of floating icebergs; and if the barometer is well up and rising, or high and steady; the probability is that the dominant flow is EASTWARD. It may amount at the most to  $1\frac{1}{2}$  knots. The usual ebb velocity is increased by the amount of this flow, and the flood is decreased or may be reversed by it.

(2.) If there are icebergs in the strait which are afloat; and if a low pressure area is passing to the southward, indicated by broken weather; the probability is that the dominant flow is WESTWARD. It is almost certainly so, after a gale from the north or northeast. It may amount at the most to  $1\frac{3}{4}$  knots. The usual flood velocity is increased by the amount of this flow, and the ebb is decreased or reversed by it.

(3.) The direction of the local wind in the strait, and the temperature of the water, cannot be counted upon as reliable indications of the direction of the dominant flow.

(4.) It appears probable that on the whole there is more westward flow in the early part of the season, in May and June; that although less pronounced in the summer, there is then usually more to the eastward; and that from September onward there is more westward flow. This would correspond with the indications above given, as the weather is apt to be more stormy as the season advances.







